A DEMONSTRATION Of the EXISTENCE, WISDOM and OMNIPOTENCE, OF GOD,

Drawn from the Knowledge of NATURE, particularly of MAN, and fitted to the meaneſt Capacity.

BY

The Arch-Biſhop of CAMBRAY, Author of TELEMACHUS.

The Second Edition.

To which is added,

A POEM on the Author by the late D. of *Devonſhire.*

LONDON,

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To His GRACE,

JOHN

Lord Archbiſhop of YORK;
Lord Primate of ENGLAND;
And Lord ALMONER *to*
Her MAJESTY.

May it pleaſe Your GRACE,

IF any Thing could add Weight to the Archbiſhop of *Cambray*'s Productions, the Prefixing Your GRACE's Name to the following Treatiſe, would certainly be the

 greateſt

greateſt Advantage I could give it in an *Engliſh* Dreſs. But the excellent Author of TELEMACHUS needs no foreign Recommendation: And whatever native Beauties his inimitable Stile may loſe in a Tranſlation, yet his ſublime Thoughts are ſtill ſufficient to ſupport his great Name. However, MY LORD, as the Subject-Matter of theſe Sheets ſeems to have a natural Right to YOUR GRACE's Patronage: So, I dare promiſe my ſelf, the Archbiſhop of CAMBRAY will be glad of this Opportunity of converſing with the Archbiſhop

ſhop of YORK. Nor can I doubt but Your GRACE will give a kind Entertainment to this illuſtrious Foreigner; ſince there appears to be ſo great a Conformity between your Perſons and Characters: Both equally diſtinguiſh'd by your high Stations in the CHURCH, and yet more by your uſeful Learning; flowing and eaſy Eloquence; extenſive Charity; affable Temper; Sanctity of Manners; and (what moſt becomes a true FATHER of the CHURCH) eminent Zeal for the Fundamental Truths of RELIGION.

I might carry the Parallel further, ſince there is ſome Similitude in Both Your GRACES ſuffering a Kind of Eclipſe, from the Severity of a Prevailing Party: But in this the Advantage muſt be allow'd to be on the Side of the PROTESTANT Prelate, as well in the Cauſe, as in other Reſpects and Circumſtances. The Archbiſhop of *Cambray* is ſtill, as to the World, in a Kind of Shade: Whereas Your GRACE's Merit and Virtues lay not long under a Cloud: But breaking forth again, and ſhining with freſh Luſtre, at the

REVOLUTION,

REVOLUTION, Your GRACE was placed in the Metropolitan See of YORK, to be, as it were, the *North-Star* of the Church of *England*. May the HAPPY EPOCH of Your GRACE's Exaltation never be forgotten, by any who wiſh well either to Church or State! And may Your GRACE live many, many Years the Soundeſt Spiritual Director to the moſt PIOUS and BEST of QUEENS; both to ſecure the CHURCH againſt its declared Enemies, and to diſcountenance its no leſs dangerous Foes, Eccleſiaſticks and Laicks

icks of Impious, *Antichriſtian* Principles, and Looſe Morals. I am with the profoundeſt Reſpect,

May it pleaſe Your GRACE,

My Lord,

Your GRACE's

Moſt Humble and moſt

Obedient, Faithful Servant,

A. BOYER.

THE FRENCH EDITOR's *Advertiſement.*

NOTHING is more ſhameful for us Chriſtians, or more expoſes our Corruption, than the Neceſſity, Pious and Zealous Men lie under to write in Vindication of the Exiſtence of GOD. *'Tis true, Reaſon is not yet depraved to ſuch a Degree, in any Man, as abſolutely to deny its Author, and be altogether ignorant of a Truth, which He has taken Care to imprint in every Part of his great Work. To know that we exiſt, is almoſt the ſame with knowing that* GOD *exiſts. The Idea of our ſelves is ſo perfectly united with that of* GOD, *that we cannot unfold the firſt ever ſo little, without being irradiated by the Brightneſs the ſecond caſts forth. We*

cannot

cannot eſcape its Light, and tho' there have been HYPOCRITES *of* ATHEISM, *yet there never were* true Atheiſts. *This Opinion concerning the Diſingenuity of ſuch impious Men, is ſupported by the open Confeſſion, the moſt abandon'd and obſtinate amongſt them, have made, upon a Thouſand Occaſions, that they could not forbear Believing the Exiſtence of a* GOD, *at the very Time they uſed all their Endeavours to root out the Belief of Him in others. Neither the ſmall Number of thoſe who were not ſo ſincere; nor the mad Fury of Three or Four, who were ſo daring as to maintain their Impiety even to Death, can deſtroy the compleat Proof that reſults from that Confeſſion. Men may carry Diſſimulation to a great Height. The Intoxication of falſe Glory; together with a ſort of Rage that ſeizes on a Soul which* GOD *has abandon'd, tranſport it beyond itſelf, and engage it to conſummate its Crime. The Deſpair of a Man who, without the leaſt Doubt, believes*

lieves a GOD; *who is upon the Point of Experiencing the Rigor of his Juſtice, and who nevertheleſs, refuſes to reconcile himſelf with him, is ſtill a more extravagant Diſpoſition, than the obſtinate Diſſimulation of the pretended Atheiſts; And yet the ſame is but too frequent.*

'Tis therefore certain, That as there are no true Atheiſts, 'tis not for them that Writings aſſerting the Exiſtence of GOD *are calculated; and when one undertakes to prove it, 'tis not in order to undeceive Men that are convinc'd of the Contrary; but only to confirm ſuch as ſtagger in their Belief. Nor is it to attack an eſtabliſh'd Error, but only to obviate, and remove Doubts. But is our ſhame the leſſer for it? Ought not we to bluſh as much for the Crime of the Impious among us, as we ſhould for the blind Obſtinacy of real Atheiſts? And as the Weakneſs of a Mind, from which the cleareſt Truth ſhould be entirely hid, would be a Scandal to humane Nature: is the Perverſeneſs of a Heart, that en-*

deavours

deavours to avoid ſeeing the cleareſt Truth, that glories in being ignorant of it, and in oppoſing it, a leſs Diſhonour to Mankind? What Abhorrence ought not we to entertain of thoſe Profligate Men, who in open Rebellion againſt the Firſt of all Sovereigns, and out of Ingratitude to the moſt liberal and bountiful of all Benefactors being inwardly perſuaded of his Exiſtence, yet ſtrive to pluck up this Perſuaſion from their Minds; endeavour to call it in Queſtion; continually labour to raiſe Clouds to obſcure that pure Light, which 'tis not in their Power to extinguiſh; Exhauſt their Brain to find out New Syſtems that may, at leaſt, ſhake the Belief of others, and augment the Number of the Unbelievers: Which is the Miſerable and only Reſource they have left, to deaden the Stings of their Conſciences, and to give, if poſſible, Incredulity an Air of Probability, by the Imaginary Multitude of the Incredulous? But how vain are their Efforts! All Truths are ſo cloſely twiſted with that

Firſt

Firſt Truth, that every one of them evidences This. The Mind can contemplate Nothing but what offers GOD *to its View. Let the Metaphyſican loſe himſelf in the Maze of abſtruſe Subtleties, and follow Paths where few Men can follow him: Yet ſtill he will find* GOD *at the End of his Inquiries. Let the Mathematician be wholly taken up with Bodies, and their ſenſible Dimenſions: Yet even in theſe he diſcovers a* GOD, *tho' He be a Spirit. Let a Lover of Hiſtory load his Memory with various Events: Yet he cannot over-look the Wiſdom, Juſtice, and Goodneſs of* GOD, *the Over ruler of Events; and the Hiſtory of Religion, in which all Things are made to center by a ſupreme Intelligence, becomes to him a Demonſtration of the Exiſtence of that very Intelligence Let a Traveller wander through ſeveral Countries: And he finds that* GOD *is known every where, at leaſt confuſedly; which cannot but perſuade him, That none but Brutes can be ignorant of Him.*

But

But of all Proofs, the moſt evident is that which is drawn from the Knowledge of the Univerſe, and of Man, *in Particular. We learn from St.* Paul, *and the* Wiſe-Man, *or rather the Holy Ghoſt, whoſe Inſtruments they were, teaches us, that this Demonſtration has convinced Philoſophers, and will convince every attentive* Man. *This Proof is diſplay'd in ſo many Places throughout the Pſalms, and the Prophet King is ſo Sublime, and ſo moving, when he dwels upon it, that 'tis manifeſt he was ſenſibly affected with it. The Holy Fathers knew ſo well its Cogency, that they omitted nothing to ſet it in its true Light, being juſtly confident, that it was ſufficient to deſtroy Impiety.* Lactancius *in his Book of the* Work of God; *St.* Athanaſius *in his Treatiſe againſt the Gentiles; St.* Gregory Nazianzenus *in his 34th Oration; St.* Baſil *and St.* Gregory *of* Nyſſa *in their Expoſitions of the firſt Chapter of* Geneſis, *have muſter'd all their Eloquence to render this Demonſtration ſenſible*

ſible to every Body. Grenada enlarges more upon it than any of thoſe Fathers, in his Catechiſm; deſcending into the minuteſt Details, in order to make that Proof familiar.

The Author of the following Treatiſe has, after ſo many great Men, made it his Buſineſs to dive to the very Bottom of it; to ſupport it by the Principles of the ſoundeſt Philoſophy, and, at the ſame Time, to adapt it to the meaneſt Capacity. Our Age affords but few Men capable of Executing ſo great a Deſign: But He who form'd it, has executed it perfectly well. It required a Sublime Genius to penetrate into all the ſecret Springs of Nature, and a vaſt Imagination to paint its Beauties. It required an eaſy Genius, and a flowing, ſoft, inſinuating Eloquence to make thoſe Beauties ſenſible; to bring down to the Level of the People, what's moſt elevated in Philoſophy; and to render the Heights of GOD acceſſible to every Body. It required a reſolute, and ſubtle Genius to obviate and defeat

the

the Cavils of the Impious: All which great Qualities ſhine in this Work; and diſcover its Author, whom his Stile alone would have ſufficiently diſcover'd.

'Tis Pity the Publick is enrich'd only, by what is got from him by Stealth. If he would have been pleaſed to reviſe this Work, he might, perhaps, have perceiv'd ſome Defects, which, I dare ſay, no Body elſe will perceive in it.

Upon the whole Matter, this Treatiſe is certainly the Beſt that's extant of the Kind: And if the Author's refin'd Taſte ſhould find in it ſomething that might be improved, I doubt whether his Delicacy would not be exceſſive; and whether, on this Occaſion, his Modeſty ſhould not get the better of his excellent Taſte.

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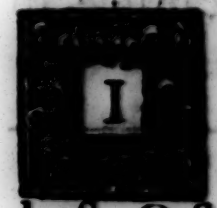
PAGE 80. Line 15. inſtead of *Bodies* r. *Beings*. p. 85. l. 11. *the Feinting* r. *their Feinting*.

A DEMONSRATION OF THE EXISTENCE OF GOD.

SECT. I.

Metaphyſical Proofs of the Exiſtence of GOD, *are not within every Body's Reach.*



Cannot open my Eyes, without Admiring the Art that ſhines throughout all Nature: The leaſt Caſt * ſuffices to make me perceive

B

* Before we proceed it is neceſſary to acquaint the Reader, that in this excellent Piece the Author often makes uſe of, *Coup d' Oeil*, an Expreſſion now much in Vogue in *French*, and which in *Engliſh* ſignifies *a Caſt of the Eye, a Glance, a Look, as alſo a, Proſpect, a Viſta*, in ſhort whatever a Man ſees at once by caſting his Eyes one way or other.

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perceive the Hand that makes every Thing.

Men accuſtom'd to meditate upon Metaphyſical Truths, and to trace up Things to their firſt Principles, may know the DEITY by its Idea: And I own that's a ſure Way to arrive at the Source of all Truth. But the more direct and ſhort that Way is, the more difficult and unpaſſable it is for the Generality of Mankind, who depend on their Senſes and Imagination.

An *Ideal* Demonſtration is ſo ſimple, that through its very Simplicity it eſcapes thoſe Minds that are incapable of Operations purely intellectual. In ſhort, the more perfect is the Way to find the FIRST BEING, the Fewer Men there are that are capable to follow it.

SECT. II.

Moral Proofs of the Exiſtence of GOD *are fitted to every Man's Capacity.*

BUT there is a leſs perfect Way, Level to the meaneſt Capacity. Men the leaſt exerciſed in Reaſoning,

ning, and the moſt tenacious of the Prejudices of the Senſes, may yet with one Look diſcover Him who has drawn Himſelf in all his Works. The Wiſdom and Power he has ſtampt upon every Thing he has made, are ſeen, as it were in a Glaſs, by thoſe that cannot contemplate Him in his own Idea. This is a Senſible and Popular Philoſophy, of which any Man, free from Paſſion and Prejudice, is capable. *Humana autem anima rationalis eſt, quæ mortalibus Vinculis Peccati pœna tenebatur, ad hoc diminutionis redacta ut per Conjecturas rerum Viſibilium ad intelligenda inviſibilia niteretur* * that is, *The Humane Soul is ſtill rational, but in ſuch a manner, that being by the Puniſhment of Sin detain'd in the Bonds of Death, it is ſo far reduc'd, that it can only endeavour to arrive at the Knowledge of Things inviſible, through the viſible.*

* *Aug. lib. 3 de Lib. Arb.*

SECT. III.

Why ſo few Perſons are attentive to the Proofs Nature affords of the Exiſtence of GOD.

IF a great Number of Men, of ſubtle and penetrating Wit, have not diſcover'd GOD with one Caſt of the Eye upon Nature, it is not matter of Wonder. For either the Paſſions they have been toſs'd by, have ſtill rendred them incapable of any fix'd Reflection; or the falſe Prejudices that reſult from Paſſions, have, like a thick Cloud, interpos'd between their Eyes, and that noble Spectacle. A Man deeply concern'd in an Affair of great importance, that ſhould take up all the Attention of his Mind, might paſs ſeveral Days in a Room, treating about his Concerns, without taking Notice of the Proportions of the Chamber, the Ornaments of the Chimney, and the Pictures about him: All which Objects would continually be before his Eyes, and yet none of them make

* *Ipſius vero Mundi qui omnia complexu ſuo coercet & continet non artificioſè ſolum, ſed plane Artifex ab eodem Zenone dicitur, conſultrix & provida Utilitatis, opportunitatumque omnium.* Cic. lib. 2. de Nat. Deor.

make any Impreſſion upon him. In this manner 'tis that Men ſpend their Lives: Every thing offers GOD to their Sight, and yet they ſee it no where. *He was in the World, and the World was made by him, and* nevertheleſs *the World did not know him:* * *In Mundo erat, et mundus per ipſum factus eſt, et mundus eum non cognovit.* They paſs away their Lives without perceiving that ſenſible Repreſentation of the DEITY. Such is the Faſcination of worldly Trifles that obſcures their Eyes! *Faſcinatio Nugacitatis obſcurat Bona.* Nay, oftentimes they will not ſo much as open them, but rather affect to keep 'em ſhut, leſt they ſhould find Him they don't look for. In ſhort, what ought to help moſt to open their Eyes, ſerves only to cloſe them faſter; I mean the conſtant Duration and Regularity of the Motions which the Supreme Wiſdom has put in the Univerſe. St. *Auſtin* tells us thoſe great Wonders have been † debaſed by being conſtantly renew'd: And *Tully* ſpeaks exactly in the ſame Manner. By 'ſeeing every day the ſame things, 'the mind grows familiar with them

* *John* ca. 1. v. 10.

† *Aſſiduitate vilueruut.*

'as well as the Eyes. It neither admires, nor inquires into the Cauſes 'of Effects that are ever ſeen to happen in the ſame manner: As if 'twere 'the Novelty, and not the Importance of the Thing it ſelf, that ſhould excite us to ſuch an inquiry: * *Sed Aſſiduitate quotidiana et conſuetudine Oculorum aſſueſcunt animi, neque admirantur neque requirunt rationes earum rerum, quas ſemper vident, perinde quaſi novitas nos magis quam magnitudo rerum debeat ad exquirandas cauſas excitare.*

* *Cic. lib. 2. de Nat. Deor.*

SECT. IV.

All Nature ſhews the Exiſtence of its Maker.

BUT, after all, whole Nature ſhews the infinite Art of its Maker. When I ſpeak of an *Art*, I mean a Collection of proper Means choſen on purpoſe, to arrive at a certain End: Or, if you pleaſe, 'tis an Order, a Method, an Induſtry, or a Set deſign. Chance, on the contrary, is a blind and neceſſary Cauſe, which neither ſets in Order, nor chuſes any thing, and which has neither Will,

Will, nor Underſtanding. Now, I maintain that the Univerſe bears the Character and Stamp of a Cauſe infinitely Powerful and Induſtrious; And, at the ſame time, that Chance, that is, the blind and fortuitous Concourſe of Cauſes neceſſary and void of Reaſon, cannot have form'd this Univerſe. To this Purpoſe 'tis not amiſs to call to mind the celebrated Compariſons of the Ancients.

* *In quibus nulla temeritas, ſed ordo appareret, & artisquædam Similitudo.* Cic. de Nat. Deor. lib. 2.

Sect. V.

Noble Compariſons proving that Nature ſhews the Exiſtence of its Maker.

Firſt Compariſon, drawn from Homer's Iliad.

WHO will believe that ſo perfect a Poem as *Homer*'s *Iliad*, was not the Product of the Genius of a great Poet, and that the Letters of the Alphabet being confuſedly jumbled and mix'd, were by Chance, as it were by the Caſt of a Pair of Dice, brought together in ſuch an Order as is neceſſary to deſcribe, in Verſes full of Harmony and Variety, ſo many great

vents; to place, and connect them ſo well together; to paint every Object with all its moſt graceful, moſt noble, and moſt affecting Attendants; in ſhort, to make every Perſon ſpeak according to his Character, in ſo natural and ſo forcible a manner? Let People argue, and ſubtilize upon the matter as much as they pleaſe, yet they never will perſwade a Man of Senſe, that the *Iliad* was the mere Reſult of Chance. *Cicero* * ſaid the ſame in relation to *Ennius*'s Annals; adding, that Chance could never make one ſingle Verſe, much leſs a whole Poem. How then can a Man of ſenſe be induc'd to believe, with Reſpect to the Univerſe, a Work, beyond Contradiction, more wonderful than the *Iliad*, what his Reaſon will never ſuffer him to believe in relation to that Poem? Let's attend another Compariſon, which we owe to St. *Gregory Nazianzenus*.

* *Cic. de Nat. Deor. lib.* 2.

SECT.

Sect. VI.

Second Compariſon drawn from the Sound *of* Instruments.

If we heard in a Room, from behind a Curtain, a ſoft and harmonious Inſtrument, ſhould we believe that Chance, without the Help of any humane Hand, could have form'd ſuch an Inſtrument? Should we ſay that the ſtrings of a Violin, for inſtance, had, of their own accord, ranged, and extended themſelves on a wooden Frame, whoſe ſeveral Parts had glued themſelves together, to form a Cavity with regular Apertures? Should we maintain that the Bow form'd without Art, ſhould be puſh'd by the Wind, to touch every ſtring ſo variouſly, and with ſuch nice Juſtneſs? What rational Man could ſeriouſly entertain a Doubt, whether a humane Hand touch'd ſuch an Inſtrument with ſo much Harmony? Would he not cry out, 'tis a Maſterly Hand that plays upon it? Let us proceed to inculcate the ſame Truth.

SECT.

SECT. VII.

Third Compariſon, drawn from a STATUE.

IF a Man ſhould find in a deſart Iſland, a fine Statue of Marble, he would undoubtedly immediately ſay, ſure, there have been Men here formerly; I perceive the Workmanſhip of a Skilful Statuary; I admire with what Niceneſs he has proportion'd all the Limbs of this Body, in Order to give them ſo much Beauty, Graceſulneſs, Majeſty, Life, Tenderneſs, Motion and Action!

What would ſuch a Man anſwer, if any Body ſhould tell him: *That's your Miſtake, a Statuary never carv'd that Figure. 'Tis made, I confeſs, with an excellent Guſto, and according to the Rules of Perfection: But yet 'tis Chance alone made it. Among ſo many Pieces of Marble, there was one that form'd it ſelf, of its own accord, in this manner; the Rains and Winds have looſen'd it from the Mountains; a violent Storm has thrown it plum upright on this Pedeſtal, which had prepared it ſelf to ſupport it in this Place.*

'Tis

'Tis a perfect Apollo *like that of* Belvedere; *a* Venus *that equals that of the* Medicis; *an* Hercules *like that of* Farneſe. *You would think, 'tis true, that this Figure walks, lives, thinks, and is juſt going to ſpeak: But, however, it is not, in the leaſt, beholden to Art; and 'tis only a blind Stroke of Chance, that has thus ſo well finiſh'd and placed it.*

Sect. VIII.

Fourth Compariſon, drawn from a Picture.

IF a Man had before his Eyes a fine Picture, repreſenting, for Example, the Paſſage of the Red Sea, with *Moſes*, at whoſe Voice the Waters divide themſelves, and riſe like Two Walls, to let the *Iſraelites* paſs dry-foot through the Deep: He would ſee, on the one ſide, that innumerable Multitude of People, full of Confidence and Joy lifting up their Hands to Heaven; and perceive on the other ſide King *Pharao* with the *Egyptians* frighted and confounded at the ſight of the Waves

Waves that join again to ſwallow them up. Now, in good Earneſt, who would be ſo bold as to affirm, That a Chamber-Maid having by Chance dawb'd that Piece of Cloth, the Colours had, of their own accord, ranged themſelves in order to produce that lively Colouring; thoſe various Attitudes; thoſe Looks ſo well expreſſing different Paſſions; that elegant Diſpoſition of ſo many Figures, without Confuſion; that decent Plaiting of Draperies; that Management of Lights; that Degradation of Colours; that exact Perſpective: In ſhort, all that the Nobleſt Genius of a Painter can invent? If there were no more in the Caſe than a little Foam at the Mouth of a Horſe, I own, as the Story goes, and which I readily allow without Examining into it, that a Stroke of a Pencil thrown in a Pet by a Painter, might once, in many Ages, happen to expreſs it well. But, at leaſt, the Painter muſt beforehand have, with Deſign, choſen the moſt proper Colours to repreſent that Foam, in order to prepare them at the End of his Pencil,

cil: And therefore 'twere only a little Chance that had finiſh'd what Art had begun. Beſides, this Work of *Art* and *Chance* together, being only a little Foam, a confuſed Object, and ſo moſt proper to credit a Stroke of Chance; an Object without Form, that requires only a little whitiſh Colour dropt from a Pencil, without any exact Figure, or Correction of Deſign: What Compariſon is there between that Foam with a whole Deſign of a large continued Hiſtory, in which the moſt fertile Fancy, and the boldeſt Genius, ſupported by the perfect Knowledge of Rules, are ſcarce ſufficient to perform what makes an excellent Picture? I cannot prevail with my ſelf to leave theſe Inſtances, without deſiring the Reader to obſerve, That the moſt rational Men are naturally extream loath to think, that Beaſts have no manner of Underſtanding, and are mere Machines. Now whence proceeds ſuch an Invincible Averſeneſs to that Opinion in ſo many Men of Senſe? 'Tis becauſe they ſuppoſe, with Reaſon, that Motions ſo exact, and according

ding to the Rules of perfect Mechaniſm, cannot be made without ſome Induſtry; and that artleſs Matter alone, cannot perform what argues ſo much Knowledge. Hence it appears, That ſound Reaſon naturally concludes, that Matter alone cannot, either by the Simple Laws of Motion, or by the Capricious Strokes of Chance, make even Animals that are mere Machines. Thoſe Philoſophers themſelves who will not allow Beaſts to have any Reaſoning Faculty, cannot avoid acknowledging, that what they ſuppoſe to be Blind and Artleſs in theſe Machines, is yet full of Wiſdom and Art in the Firſt Mover, who made their Springs and regulated their Movements. Thus the moſt oppoſite Philoſophers perfectly agree in Acknowledging, that Matter and Chance cannot, without the Help of Art, produce all we obſerve in Animals.

SECT. IX.

A Particular Examination of NATURE.

AFter theſe Compariſons, about which I only deſire the Reader

der to conſult himſelf, without any Argumentation, I think 'tis high Time to enter into a Detail of Nature. I do not pretend to penetrate through the Whole: Who is able to do it? Neither do I pretend to enter into any Phyſical Diſcuſſion. Such way of Reaſoning requires a certain deep Knowledge, which abundance of Men of Wit and Senſe never acquir'd; and therefore I will offer nothing to them but the ſimple Proſpect of the Face of Nature. I will entertain them with nothing but what every Body knows, and which requires only a little calm and ſerious Attention.

Sect. X

Of the General Structure *of the* Universe.

LET us, in the firſt Place, ſtop at the great Object that firſt ſtrikes our Sight, I mean the *General Structure* of the *Univerſe*. Let us caſt our Eyes on this Earth that bears us. Let us look on that vaſt Arch of

Quanta ſit admirabilitas cœleſtium rerum, atque terreſtrium

of the Skies that covers us; thoſe immenſe Regions of Air, and Depths of Water that ſurround us; and thoſe bright Stars that light us. A Man who lives without Reflecting, thinks only on the Parts of Matter that are near him, or have any Relation to his Wants. He only looks upon the Earth, as on the Floor of his Chamber; and on the Sun that lights him in the Day-time, as on the Candle that lights him in the Night. His Thoughts are confin'd within the Place he inhabits. On the contrary, a Man who is uſed to contemplate and reflect carries his Looks further, and curiouſly conſiders the almoſt infinite Abyſſes that ſurround him on all ſides. A large Kingdom appears then to him but a little Corner of the Earth; the Earth it ſelf is no more to his Eyes than a Point in the Maſs of the Univerſe; and he admires to ſee himſelf placed in it, without knowing which way he came there.

SECT.

Sect. XI.

Of the Earth.

WHO is it that hung and pois'd this motionleſs Globe of the Earth? Who laid its Foundation? Nothing ſeems more Vile and Contemptible; for the meaneſt Wretches tread it under Foot; but yet 'tis in order to poſſeſs it, that we part with the greateſt Treaſures. If it were harder than it is, Man could not open its Boſom to cultivate it; and if it were leſs hard, it could not bear them, and they would ſink every where, as they do in Sand, or in a Bog. 'Tis from the inexhauſtible Boſom of the Earth, we draw what's moſt Precious. That ſhapeleſs, vile, and rude Maſs aſſumes the moſt various Forms; and yields alone, by Turns, all the Goods we can deſire. That dirty Soil transforms it ſelf into a Thouſand fine Objects that charm the Eye. In the compaſs of One Year it turns into Branches, Twigs, Buds, Leaves, Bloſſoms,

Fruits, and Seeds, in order, by thoſe various Shapes, to multiply its Liberalities to Mankind. Nothing exhauſts the Earth: The more we tear her Bowels, the more ſhe's Liberal. After ſo many Ages, during which ſhe has produced every Thing, ſhe is not yet worn out. She feels no Decay from Old Age; and her Entrails ſtill contain the ſame Treaſures. A Thouſand Generations have paſs'd away, and return'd into her Boſom: Every thing grows Old, ſhe alone excepted: For ſhe grows Young again every Year in the Spring. She's never wanting to Men; but fooliſh Men are wanting to themſelves, in neglecting to cultivate Her. 'Tis through their Lazineſs and Extravagance they ſuffer Brambles and Briars to grow inſtead of Grapes and Corn. They contend for a Good they let periſh. The Conquerors leave uncultivated the Ground for the Poſſeſſion of which they have ſacrificed the Lives of ſo many Thouſand Men, and have ſpent their own in Hurry and Trouble. Men have before them vaſt Tracts of Land uninhabited and uncultivated

cultivated; and they turn Mankind Topſy-turvy for one Nook of that neglected Ground in Diſpute. The Earth, if well cultivated, would feed a Hundred Times more Men than now ſhe does. Even the Uneveneſs of Ground which at firſt, ſeems to be a Defect, turns either into Ornament or Profit. The Mountains aroſe and the Vallys deſcended to the Place the Lord had appointed for them. Thoſe different Grounds have their particular Advantages, according to the divers Aſpects of the Sun. In thoſe deep Vallies grows freſh and tender Graſs to feed Cattle. Next to them opens a vaſt Champion cover'd with a rich Harveſt. Here, Hills riſe like an Amphitheater, and are crown'd with Vineyards and Fruit-Trees. There high Mountains carry aloft their frozen Brows to the very Clouds, and the Torrents that run down from them become the Springs of Rivers. The Rocks that ſhew their craggy Tops, bear up the Earth of Mountains, juſt as the Bones bear up the Fleſh in Human Bodies. That Variety yields at once, a ra-

viſhing Proſpect to the Eye, and, at the ſame Time, ſupplies the divers Wants of Man. There's no Ground ſo barren, but has ſome profitable Property. Not only black and fertile Soil, but even Clay and Gravel recompence a Man's Toil. Drain'd * Moraſſes become Fruitful; Sand for the moſt part, only covers the Surface of the Earth; And when the Husbandman has the Patience to digg deeper, he finds a new Ground that grows fertile as faſt as it is turn'd, and expos'd to the Rays of the Sun.

* *Fens.*

There's ſcarce any Spot of Ground abſolutely barren, if a Man do not grow Weary of Digging, and Turning it to the enlivening Sun, and if he require no more from it, than it is proper to bear, Amidſt Stones and Rocks there's ſometimes excellent Paſture; and their Cavities have Veins, which being penetrated by the piercing Rays of the Sun, furniſh Plants with moſt Savoury Juices for the Feeding of Herds and Flocks. Even Sea-Coaſts that ſeem to be the moſt Sterile and Wild, yield ſometimes either delicious Fruits,

Xenophon's *Country Oeconomy.*

Fruits, or moſt wholeſome Medicines, that are wanting in the moſt fertile Countries. Beſides, 'tis the Effect of a wiſe over-ruling Providence, that no Land yields all that's uſeful to Human Life. For Want invites Men to Commerce, in order to ſupply one another's Neceſſities. 'Tis therefore that Want that's the natural Tie of Society between Nations: Otherwiſe all the People of the Earth would be reduc'd to one Sort of Food and Cloathing; and nothing would invite them to know and viſit one another.

Sect. XII.

Of Plants.

ALL that the Earth produces being corrupted, returns into her Boſom, and becomes the Seed of a new Production. Thus ſhe reſumes all ſhe has given, in order to give it again. Thus the Corruption of Plants, and the Excrements of the Animals ſhe feeds, feed her, and improve her Fertility. Thus the

more ſhe gives, the more ſhe reſumes; and ſhe is never exhauſted, provided they who cultivate her reſtore to her what ſhe has given. Every thing comes from her Boſom; Every thing returns to it; and nothing is loſt in it. Nay, all Seeds multiply there: If, for inſtance, you truſt the Earth with ſome Grains of Corn, as they corrupt they germinate and ſpring; and that teeming Parent reſtores with Uſury more Ears than ſhe had receiv'd Grains. Dig into her Entrails: You'll find in them Stone and Marble for the moſt magnificent Buildings. But who is it that has laid up ſo many Treaſures in her Boſom, upon Condition that they ſhould continually produce themſelves anew? Behold how many precious and uſeful Metals; how many Minerals deſign'd for the Conveniency of Man!

Admire the Plants that ſpring from the Earth: They yield Food for the Healthy, and Remedies for the Sick. Their ſpecies and Vertues are innumerable. They deck the Earth, yield Verdure, fragrant Flowers, and delicious Fruits. Do you

you ſee thoſe vaſt Foreſts that ſeem as Old as the World? Thoſe Trees ſink into the Earth by their Roots, as deep as their Branches ſhoot up to the Sky. Their Roots defend them againſt the Winds, and fetch up, as it were by Subteranean Pipes, all the Juices deſtin'd to feed the Trunk. The Trunk itſelf is cover'd with a tough Bark that ſhelters the tender Wood from the Injuries of the Air. The Branches diſtribute by ſeveral Pipes the Sap which the Roots had gather'd up in the Trunk. In Summer, the Boughs protect us with their Shadow, againſt the Scorching Rays of the Sun. In Winter, they feed the Fire that preſerves in us natural Heat. Nor is Burning the only uſe Wood is fit for: It is a ſoft, tho' ſolid and durable matter, to which the Hand of Man gives, with Eaſe, all the Forms he pleaſes, for the greateſt Works of Architecture and Navigation. Moreover, Fruit Trees by bending their Boughs towards the Earth, ſeem to offer their Crop to Man. The Trees and Plants, by letting their Fruit, or Seed drop down, provide for a nu-

merous Poſterity about them. The tendereſt Plant, the leaſt of Herbs and Pulſe are, in little, in a ſmall Seed, all that's diſplay'd in the higheſt Plants and largeſt Tree. Earth that never changes, produces all thoſe Alterations in her Boſom.

SECT. XIII.

Of WATER.

LET us now behold what we call Water. It is a Liquid, clear, and tranſparent Body, On the one hand it flows, ſlips, and runs away; and on the other, it aſſumes all the Forms of the Bodies that ſurround it, having properly none of its own. If water were more rarefied, or thinner, it would be a kind of Air; and ſo the whole Surface of the Earth would be dry and ſterile. There would be none but Volatiles; no living Creature could ſwim; no Fiſh could live; nor would there be any Traffick by Navigation. What induſtrious and ſagacious Hand has found means to thicken the Water, by ſubtilizing the Air, and ſo well to di-

diſtinguiſh thoſe two ſorts of fluid Bodies? If Water were ſome what more rarefied, it could no longer ſuſtain thoſe prodigious floating Buildings, called Ships. Bodies that have the leaſt Ponderoſity would preſently ſink under Water. Who is it that took care to frame ſo juſt a Configuration of Parts, and ſo exact a Degree of Motion, as to make Water ſo fluid, ſo penetrating, ſo ſlippery, ſo incapable of any Conſiſtency: And yet ſo ſtrong to bear, and ſo impetuous to carry off and waft away the moſt unwieldy Bodies? It is docile; Man leads it about as a Rider does a well-manag'd Horſe. He diſtributes it as he pleaſes; He raiſes it to the Top of ſteep Mountains, and makes uſe of its Weight to let it fall, in order to riſe again, as high as it was at firſt. But Man who leads Waters with ſuch abſolute Command, is, in his turn, led by them. Water is one of the greateſt moving Powers, that Man can employ to ſupply his Defects in the moſt neceſſary Arts, either through the Smalneſs or Weakneſs of his Body. But the

Waters,

Waters, which notwithſtanding their Fluidity, are ſuch ponderous Bodies, do nevertheleſs riſe above our Heads, and remain a long while hanging there. Do you ſee thoſe Clouds that fly, as it were, * on the Wings of the Winds? If they ſhould fall, on a ſudden, in Watry Pillars, rapid like a Torrent, they would drown and deſtroy every thing where they ſhould happen to fall, and the other Grounds would remain dry. What hand keeps them in thoſe pendulous Reſervatories, and permits them to fall only by Drops as it they diſtill'd through a Gardiner's Watering-Pot? Whence comes it, that in ſome hot Countries, where ſcarce any Rain ever falls, the nightly Dews are ſo plentiful, that they ſupply the Want of Rain: And that in other Countries, ſuch as the Banks of the *Nile* and *Ganges*, the regular Inundation of Rivers, at certain Seaſons of the Year, never fails to make up what the Inhabitants are deficient in, for the Watering of the Ground? Can one imagine Meaſures better concerted,

* *Super pennas ventorum.*

to

to render all Countries Fertile and Fruitful?

Thus Water quenches, not only the Thirſt of Men, but likewiſe of arid Lands: And he who gave us that fluid Body, has carefully diſtributed it throughout the Earth, like Pipes in a Garden. The Waters fall from the Tops of Mountains where their Reſervatories are placed. They gather into Rivulets in the Bottom of Valleys. Rivers run in winding Streams through vaſt Tracts of Land, the better to water them; And, at laſt, they precipitate themſelves into the Sea, in order to make it the Center of Commerce for all Nations. That Ocean, which ſeems to be placed in the midſt of Lands, to make an eternal † Separation between them, is, on the contrary, the common Rendez-vous of all the People of the Earth, who could not go, by Land, from one End of the World to

† The illuſtrious Author alludes to and rectifies this Thought of *Horace*, *Carm. lib.* 1. *Ode.* 3.

Nequicquam DEUS *abſcidit*
Prudens Oceano Diſſociabili
Terras, ſi tamen impiæ
Non tangenda rates tranſiliunt vada.

to the other, without infinite Fatigue, tedious Journeys, and numberleſs Dangers. 'Tis by that trackleſs Road, croſs the bottomleſs Deep, that the Old World ſhakes Hands with the New; and that the New ſupplys the Old with ſo many Conveniencies and Riches. The Waters, diſtributed with ſo much Art, circulate in the Earth, juſt as the Blood does in a Man's Body. But beſides this perpetual Circulation of the Water, there is beſides the Flux * and Reflux of the Sea. Let us not inquire into the Cauſes of ſo Myſterious an Effect. What's certain is, that the Tide carries, or brings us back to certain Places, at preciſe Hours. Who is it that makes it withdraw, and then come back with ſo much Regularity? A little more or leſs Motion in that fluid Maſs would diſorder all Nature: For a little more Motion in a Tide or Flood would drown whole Kingdoms. Who is it that knew how to take ſuch exact Meaſures in immenſe Bodies? Who is it that knew ſo well how to keep a juſt Medium

* *Vulgarly, Flowing & Ebbing.*

Medium between too much and too little? What Hand has ſet to the Sea the unmoveable Boundary it muſt reſpect through the Series of all Ages, by telling it: There, thy proud Waves ſhall come and break? But theſe Waters ſo fluid, become, on a ſudden, during the Winter, as hard as Rocks. The Summits of high Mountains, have, even at all Times, Ice and Snow, which are the Springs of Rivers, and ſoaking Paſture-Grounds render them more fertile. Here Waters are ſweet to quench the Thirſt of Man: There they are briny, and yield a Salt that ſeaſons our Meat, and makes it incorruptible. In fine, if I liſt up my Eyes, I perceive in the Clouds that fly above us, a ſort of hanging Seas, that ſerve to temper the Air, break the fiery Rays of the Sun, and water the Earth when it is too dry. What Hand was able to hang over our Heads thoſe great Reſervatories of Waters? What Hand takes Care never to let them fall, but in moderate Showers?

SECT.

SECT. XIV.

Of the AIR.

AFter having conſider'd the Waters, let us now contemplate another Maſs yet of far greater Extent. Do you ſee what is call'd Air? 'Tis a Body ſo pure, ſo ſubtle, and ſo tranſparent, that the Rays of the Stars, ſeated at a diſtance almoſt infinite from us, pierce quite through it, without difficulty, and in an inſtant, to light our Eyes. Had this fluid Body been a little leſs ſubtle, it would either have intercepted the Day from us, or at moſt would have left us but a duskiſh and confuſed Light, juſt as when the Air is fill'd with thick Fogs. We live plung'd in Abyſſes of Air, as Fiſhes do in Abyſſes of Water. As the Water, if it were ſubtiliz'd, would become a kind of Air, which would occaſion the Death of Fiſhes; ſo the Air would deprive us of Breath if it ſhould become more humid and thicker. In ſuch a Caſe we ſhould drown in the Waves of that thicken'd Air, juſt

juſt as a terreſtrial Animal drowns in the Sea. Who is it that has ſo nicely purified that Air we breath? If it were thicker, it would ſtifle us; and if it were too ſubtle, it would want that Softneſs which continually feeds the Vitals of Man. We ſhould be ſenſible every where of what we experience on the Top of the higheſt Mountains, where the Air is ſo thin that it yields no ſufficient Moiſture and Nouriſhment for the Lungs. But what inviſible Power raiſes, and lays ſo ſuddenly the Storms of that great fluid Body, of which thoſe of the Sea are only Conſequences? From what Treaſury come forth the Winds that purify the Air, cool ſcorching Heats, temper the Sharpneſs of Winter, and, in an Inſtant, change the whole Face of Heaven? On the Wings of thoſe Winds, the Clouds fly from one End of the Horizon to the other. 'Tis known that certain * Winds blow in certain Seas, at ſome ſtated Seaſons. They continue a fix'd Time, and others ſucceed them, as it were on purpoſe, to render Navigation both commodious

* *Call'd by Sea-Men Trade-Winds.*

dious and regular: So that if Men are but as patient, and as punctual as the Winds, they may, with Eaſe, perform the longeſt Voyages.

SECT. XV.

Of FIRE.

DO you ſee that Fire that ſeems kindled in the Stars, and ſpreads its Light on all ſides? Do you ſee that Flame which certain Mountains vomit up, and which the Earth feeds with Sulphur within its Entrails? That ſame Fire peaceably lurks in the Veins of Flints; and expects to break out, till the Colliſion of another Body excites it to ſhock Cities and Mountains. Man has found the Way to kindle it, and apply it to all his Uſes, both to bend the hardeſt Metals, and to feed with Wood, even in the moſt frozen Climes, a Flame that ſerves him inſtead of the Sun, when the Sun removes from him. That ſubtle Flame glides and penetrates into all Seeds. It is, as it were, the Soul of all living Things; it conſumes all that's Impure

Impure, and renews what it has purified. Fire lends its Force and Activity to weak Men. It blows up, on a ſudden, Buildings and Rocks. But have we a mind to confine it to a more moderate Uſe? It warms Man, and makes all ſorts of Food fit for his Eating. The Ancients, in Admiration of Fire, believed it to be a Celeſtial Gift, which Man had Stolen * from the Gods.

Sect. XVI.

Of Heaven.

'TIS Time to lift up our Eyes to Heaven. What Power has built over our Heads ſo vaſt and ſo magnificent an Arch? What a ſtupendous Variety of admirable Objects is here? 'Tis, no doubt, to preſent us with a noble Spectacle that an Omnipotent Hand has ſet before our Eyes ſo great and ſo bright Objects. 'Tis in order to

D raiſe

* *Audax Iapeti genus*
Ignem fraude malâ gentibus intulit.
Poſt ignem aetheréâ domo
Subductum, &c. Horat. Carm *Lib.* 1 *Ode* 3.

raiſe our Admiration of Heaven, ſays *Tully*, † That GOD made Man unlike the reſt of * Animals. He ſtands upright, and lifts up his Head, that he may be employ'd about the Things that were above him. Sometimes we ſee a duskiſh Azure Sky, where the pureſt Fires twinkle. Sometimes we behold, in a temperate Heaven, the ſofteſt Colours, mix'd with ſuch Variety, as 'tis not in the Power of Painting to imitate. Sometimes we ſee Clouds of all Shapes and Figures, and of all the brighteſt Colours, which every Moment, ſhift that beautiful Decoration, by the fineſt Accidents and various Effects of Light. What does the regular Succeſſion of Day and Night, denote? For ſo many Ages as are paſt, the Sun never fail'd ſerving Men, who cannot live without it. Many Thouſand Years are elaps'd,

† Lib. 2. *De Nat. Deor.*

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* *Pronaque cum ſpectent Animalia cætera Terram.*
Os homini Sublime dedit; Cœlumque videre
Juſſit, & erectos ad Sidera tollere vultus.
Ovid. Metam. Lib. 1.

This Thought of *Ovid* was imitated by the Poet *Silius*, who ſays,

Nonne vides hominum ut celſos ad Sidera Vultus
Sustulerit Deus, & Sublimia finxerit Ora.

elaps'd, and the Dawn never once miſs'd proclaiming the Approach of the Day. It always begins preciſely, at a certain Moment and Place. The Sun, ſays the Holy Writ, knows where it ſhall ſet every Day. By that means it lights, by Turns, the Two Hemiſpheres, or Sides of the Earth, and viſits all thoſe for whom its Beams are deſign'd. The Day is the Time for Society, and Labour; the Night wrapping up the Earth with its Shadow, ends, in its Turn, all manner of Fatigue, and alleviates the Toil of the Day. It ſuſpends, and quiets all; and ſpreads Silence and Sleep every where. By refreſhing the Bodies, it renews the Spirits. Soon after, Day returns to ſummon again Man to Labour, and revive all Nature.

Sect. XVII.

Of the Sun.

BUT beſides the conſtant Courſe by which the Sun forms Days and Nights, it makes us ſenſible of another, by which, for the Space of

Six Months, it approaches one of the Poles, and at the End of thoſe Six Months, goes back with equal Speed, to viſit the other Pole. This excellent Order makes one Sun ſufficient for the whole Earth. If it were of a larger Size at the ſame Diſtance, it would ſet the whole Globe on Fire, and the Earth would be burnt to Aſhes. And if, at the ſame Diſtance, it were leſſer, the Earth would be all over frozen, and uninhabitable. Again, if, in the ſame Magnitude, it were nearer us, it would ſet us in Flames; and if more remote, we ſhould not be able to live on the terreſtial Globe, for want of Heat. What Pair of Compaſſes, whoſe Circumference encircles both Heaven and Earth, has fix'd ſuch juſt Dimenſions? That Star does no leſs befriend that Part of the Earth from which it removes, in order to temper it, than that it approaches, to favour it with its Beams. Its kind, beneficent Aſpect, fertilizes all it ſhines upon. This Change produces that of the Seaſons, whoſe Variety is ſo agreeable. The Spring ſilences bleak, froſty Winds, brings

brings forth Bloſſoms and Flowers, and promiſes Fruits. The Summer yields rich Harveſts. The Autumn beſtows the Fruits promis'd by the Spring. The Winter, which is a kind of Night, wherein Man refreſhes and reſts himſelf, lays up all the Treaſures of the Earth in its Center, with no other Deſign, but that the next Spring may diſplay them, with all the Graces of Novelty: Thus Nature, variouſly attired, yields ſo many fine Proſpects, that ſhe never gives Man Leiſure to be diſguſted with what he poſſeſſes.

But how is it poſſible for the Courſe of the Sun to be ſo regular? It appears that Star is only a Globe of moſt ſubtle Flame: Now, what is it that keeps that Flame, ſo reſtleſs and ſo impetuous, within the exact Bounds of a perfect Globe? What Hand leads that Flame, in ſo ſtrait a Way, and never ſuffers it to ſlip one ſide or other? That Flame is held by Nothing; and there is no Body that can either guide it, or keep it under: *For* it would ſoon conſume whatever Body it ſhould

be encloſed in. Whither is it going? Who has taught it inceſſantly, and ſo regularly to turn in a ſpace where it is free and unconſtrain'd? Does it not circulate about us, on purpoſe to ſerve us? Now if this Flame does not turn, and if, on the Contrary, 'tis our Earth that turns, I'd fain know how it comes to be ſo well placed in the Center of the Univerſe, as it were the *Focus* or the Heart of all Nature. I'd fain know alſo, how it comes to paſs that a Globe of ſo ſubtle Matter, never ſlips on any ſide, in that immenſe Space that ſurrounds it; and wherein, it ſeems to ſtand with Reaſon, that all fluid Bodies ought to yield to the Impetuoſity of that Flame.

In fine, I'd fain know, how it comes to paſs, that the Globe of the Earth, which is ſo very hard, turns ſo regularly about that Planet, in a ſpace where no ſolid Body keeps it faſt, to regulate its Courſe? Let Men, with the Help of Phyſicks, contrive the moſt ingenious Reaſons to explain this *Phænomenon*: All their Arguments (ſuppoſing them to be true)

true) will become Proofs of the Deity. The more the great Spring, that directs the Machine of the Univerſe is exact, ſimple, conſtant, certain, and productive of Abundance of uſeful Effects; the more 'tis plain, that a moſt potent, and moſt artful Hand knew how to pitch upon the Spring which is the moſt perfect of all.

Sect. XVIII.

Of the Stars.

BUT let us once more view that immenſe arch'd Roof, where the Stars ſhine, and which covers our Heads like a Canopy. If it be a ſolid Vault, what Architect built it? Who is it that has fix'd ſo many great Luminous Bodies to certain Places of that Arch, and at certain Diſtances? Who is it that makes that Vault turn ſo regularly about us? If on the Contrary, the Skies are only immenſe Spaces full of fluid Bodies, like the Air that ſurrounds us: How comes it to paſs that ſo many ſolid Bodies

float in them, without ever ſinking, or ever coming nearer one another? For all Aſtronomical Obſervations that have been made, in ſo many Ages, not the leaſt Diſorder, or irregular Motion has yet been diſcover'd in the Heavens. Will a fluid Body range in ſuch conſtant and regular Order, Bodies that ſwim circularly within its Sphere? But what does that almoſt innumerable Multitude of Stars mean? The Profuſion with which the Hand of GOD has ſcatter'd them through his Work, ſhews nothing is difficult to his Power. He has caſt them about the Skies, as a Magnificent Prince, either ſcatters Money by Hand-fulls, or ſtuds his Cloaths with precious Stones. Let who will ſay, if he pleaſes, that the Stars are as many Worlds, like the Earth we inhabit; I grant it for one Moment: *But then*, how Potent and Wiſe muſt He be, who makes Worlds as numberleſs as the Grains of Sand that cover the Sea-ſhore; and who, without any Trouble, for ſo many Ages, governs all theſe wandring Worlds, as a Shepherd does a Flok of Sheep?

Suſtinendi Muneris propter imbecillitatem difficultas minimè cadit in Majeſtatem Deorum Cic. *Lib.* 2. *de* Nat. Deor.

If

If, on the contrary, they are only, as it were, lighted Torches, to ſhine in our Eyes in this ſmall Globe, call'd Earth: How great is that Power, which nothing can fatigue, nothing can exhauſt! What a profuſe Liberality it is, to give Man, in this little Corner of the Univerſe, ſo marvellous a Spectacle!

But among thoſe Stars I perceive the Moon, which ſeems to ſhare with the Sun the Care and Office of Lighting us. She appears, at ſet Times, with all the other Stars, when the Sun is oblig'd to go and carry back the Day to the other Hemiſphere. Thus Night it ſelf, notwithſtanding its Darkneſs, has a Light, Duskiſh indeed, but ſoft, and uſeful. That Light is borrow'd from the Sun, tho' abſent: And thus every thing is managed, with ſuch excellent Art, in the Univerſe, that a Globe near the Earth, and as dark, as ſhe of itſelf, ſerves neverrheleſs to ſend back to her by Reflection, the Rays it receives from the Sun; And that the Sun lights, by means of the Moon, the People

People that cannot ſee him, while he muſt light others.

It may be ſaid, that the Motion of the Stars is ſettled and regulated by unchangeable Laws. I ſuppoſe it is: But this very Suppoſition proves what I labour to evince. Who is it that has given to all Nature Laws at once ſo conſtant and ſo wholeſom; Laws ſo very ſimple, that one is tempted to believe, they eſtabliſh themſelves of their own accord; and ſo productive of beneficial and uſeful Effects, that one cannot avoid acknowledging a Marvellous Art in them? Whence proceeds the Government of that Univerſal Machine, which inceſſantly works for us, without ſo much as our Thinking upon it? To whom ſhall we aſcribe the *Choice* and Gathering of ſo many deep, and ſo well concerted Springs; and of ſo many Bodies, great and ſmall, viſible and inviſible, which equally concurr to ſerve us? The leaſt Atom of this Machine, that ſhould happen to be out of Order, would unhinge all Nature. For the Springs and Move-

ments

ments of a Watch are not put together with ſo much Art and Niceneſs, *as thoſe of the Univerſe.* What then muſt be a Deſign ſo extenſive, ſo coherent, ſo excellent, ſo beneficial? The neceſſity of thoſe Laws, inſtead of deterring me from inquiring into their Author, does but heighten my Curioſity, and Admiration. Certainly, it required a Hand equally artful and powerful, to put in his Work an Order equally Simple and Teeming, conſtant and uſeful. Wherefore I will not ſcruple to ſay with the Scripture, *Let every Star haſte to go whither the Lord ſends it; and when He ſpeaks, let them anſwer with Trembling; Here we are,* Ecce adſumus.

Sect. XIX.

Of Animals, Beasts; Fowl; Birds, Fishes; Reptiles, *and* Insects.

BUT let us turn our Eyes towards Animals, which ſtill are more worthy of Admiration than either the Skies, or Stars. Their Species are numberleſs. Some have but two Feet, others Four, others again

again a great many. Some walk; others crawl, or creep; others fly; others ſwim; others fly, walk, or ſwim, by Turns. The Wings of Birds, and the Fins of Fiſhes, are like Oars, that cut the Waves either of Air or Water, and ſteer the floating Body either of the Bird, or Fiſh, whoſe Structure is like that of a Ship. But the Pinions of Birds have Feathers with a Down, that ſwells in the Air, and which would grow unwieldy in the Water. *And*, on the contrary, the Fins of Fiſhes have ſharp and dry Points, which cut the Water, without imbibing it, and which don't grow heavier by being wet. A ſort of Fowl that ſwim, ſuch as ſwans, keep their Wings, and moſt of their Feathers above Water, both leſt they ſhould wet them, and that they may ſerve them, as it were, for Sails. They have the Art to turn thoſe Feathers againſt the Wind, and, in a manner, to tack, as Ships do when the Wind does not ſerve. Water Fowls, ſuch as Ducks, have at their Feet large Skins that ſtretch, ſomewhat like Rackets, to keep

keep them from ſinking on the ooſy and miry Banks of Rivers.

Amongſt the Animals, Wild Beaſts, ſuch as Lions, have their biggeſt Muſcles about the Shoulders, Thighs, and Legs; and therefore theſe Animals are nimble, briſk, nervous, and ready to ruſh forward. Their Jaw-bones are prodigiouſly large, in proportion to the reſt of their Bodies. They have Teeth and Claws, which ſerve them, as terrible Weapons, to tear in Pieces and devour other Animals. For the ſame Reaſon, Birds of Prey, ſuch as Eagles, have a Beak and Pounces that pierce every Thing. The Muſcles of their Pinions are extream large, and brawny, that their Wings may have a ſtronger and more rapid Motion: And ſo thoſe Creatures, tho' ſomewhat heavy, ſoar aloft and towr up eaſily to the very Clouds, from whence they ſhoot, like a Thunder-bolt, on the Quarry they have in View. Other Animals have Horns. The greateſt ſtrength of ſome lies in their Backs and Necks; and others can only kick.

kick. Every Species, however, has both offenſive and defenſive Arms. Their Hunting is a kind of War, which they wage one againſt another, for the Neceſſities of Life. They have alſo Laws and a Government among themſelves. Some, like Tortoiſes, carry the Houſe wherein they were born; others build theirs, as Birds do, on the higheſt Branches of Trees, to preſerve their Young from the Inſult of unwing'd Creatures, and they even lay their Neſts in the thickeſt Boughs to hide them from their Enemies. Another, ſuch as the Beaver, builds in the very Bottom of a Pond, the Sanctuary he prepares for himſelf, and knows how to caſt up Dikes round it, to preſerve himſelf by the neighbouring Inundation. Another, like a Mole, has ſo pointed and ſo ſharp a Snout, that in one Moment, he pierces through the hardeſt Ground, in order to provide for himſelf a ſubterraneran Retreat. The cunning Fox digs a Kennel with two Holes to go out and come in at, that he may not be either ſurpriz'd, or trapt by the Huntſ-

men.

men. The Reptiles are of another Make. They curl, wind, ſhrink, and ſtretch by the Springs of their Muſcles; they creep, twiſt about, ſqueeze, and hold faſt the Bodies they meet in their Way; and eaſily ſlide every where. Their Organs are almoſt independent one on the other; ſo that they ſtill live when they are cut into Two. The long-legg'd Birds, ſays *Cicero*, are alſo long-neck'd in Proportion, that they may bring down their Bill to the Ground, and take up their Food. It is the ſame with the Camel; But the Elephant whoſe Neck through its Bigneſs, would be too heavy, if it were as long as that of the Camel, was furniſh'd with a Trunk, which is a Contexture of Nerves and Muſcles, which he ſtretches, ſhrinks, winds and turns every way, to ſeize on Bodies, lift them up, or throw them off: For which Reaſon the *Latins* call'd that Trunk, a Hand.

Certain Animals ſeem to be made, on purpoſe, for Man. The Dog is born to careſs and fawn upon him; to obey and be under Command; to give him an agreeable Image of

Society

Society, Friendſhip, Fidelity, and Tenderneſs; to be true to his Truſt; Eagerly to hunt down, courſe and catch ſeveral other Creatures, to leave them afterwards to Man, without retaining any part of the Quarry. The Horſe, and ſuch other Animals, are within the Reach and Power of Man; to eaſe him of his Labour, and to take upon them a Thouſand Burdens. They are born to carry, to walk, to ſupply Man's Weakneſs, and to obey all his Motions. Oxen are endow'd with Strength and Patience, in order to draw the Plough and till the Ground. Cows yield ſtreams of Milk. Sheep have in their Fleeces a Superfluity which is not for them, and which ſtill grows and renews, as it were to invite Men to ſhear them every Year. Even Goats furniſh Man with a long Hair, for which they have no uſe, and of which he makes Stuffs to cover himſelf. The Skins of ſome Beaſts ſupply Men with the fineſt and beſt Linings, in the Countries that are moſt remote from the Sun. Thus the Author of Nature has cloathed Beaſts according

according to their Neceſſities; and their Spoils ſerve afterwards to cloath Men, and keep them warm in thoſe frozen Climes. The Living Creatures that have little or no Hair have a very thick, and very hard Skin, like Scales; others have even Scales that cover one another, as Tiles on the Top of a Houſe, and which either open or ſhut, as it beſt ſuits with the living Creature, either to extend itſelf, or ſhrink. Theſe Skins and Scales ſerve the Neceſſities of Men: And thus in Nature, not only Plants, but Animals alſo are made for our Uſe. Wild Beaſts themſelves either grow tame, or at leaſt, are afraid of Man. If all Countries were peopled and govern'd, as they ought to be, there would not be any where Beaſts ſhould attack Men. For no Wild Beaſts would be found but in remote Foreſts, and they would be preſerv'd in order to excerciſe the Courage, Strength, and Dexterity of Mankind, by a Sport that ſhould repreſent War; ſo that there never would be any Occaſion for real Wars among Nations. But obſerve that Living Creatures that are noxious to

to Man are the leaſt teeming, and that the moſt uſeful, multiply moſt. There are, beyond Compariſon, more Oxen and Sheep kill'd, than Bears or Wolves; and nevertheleſs the Number of Bears and Wolves is infinitely leſs than that of Oxen and Sheep ſtill on Earth. Obſerve likewiſe, with *Cicero*, that the Females of every Species have a Number of Teats proportion'd to that of the Young ones they generally bring forth. The more young they bear, with the more Milk-ſprings, has Nature ſupply'd them, to ſuckle them.

While Sheep let their Wool grow for our Uſe, Silk-Worms, in Emulation with each other, ſpin rich Stuffs and ſpend themſelves to beſtow them upon us. They make of their Cod a Kind of Tomb, and ſhutting up themſelves in their own Work, they are new-born under another Figure, in order to perpetuate themſelves. On the other hand, the Bees carefully ſuck and gather the Juice of Odorous and fragrant Flowers, in order to make their Honey; and range it in ſuch an Order as may ſerve for a Pattern to Men. Several Inſects

ſects are transform'd, ſometimes into Flys, ſometimes into Worms, or Maggots. If one ſhould think ſuch Inſects uſeleſs, let him conſider, that what makes a Part of the Great Spectacle of the Univerſe, and contributes to its Variety, is not altogether uſeleſs to ſedate, and contemplative Men. What can be more noble, and more magnificent, than that great Number of Common-Wealths of Living Creatures ſo well govern'd, and every Species of which has a different Frame from the other? Every thing ſhews how much the Skill and Workmanſhip of the Artificer ſurpaſſes the vile Matter he has work't upon. Every living Creature, nay even Gnats appear wonderful to me. If one finds 'em troubleſom, he ought to conſider, that 'tis neceſſary that ſome Anxiety and Pain be mix'd with Man's Conveniencies: For if nothing ſhould moderate his Pleaſures, and exerciſe his Patience, he would either grow ſoft and effeminate, or forget himſelf.

BIBLIOTHECA BODLEIANA

SECT. XX.

Admirable ORDER *in which all the Bodies that make up the* UNIVERSE *are ranged.*

LET us now conſider the Wonders that ſhine equally both in the largeſt, and the ſmalleſt Bodies. On the one ſide, I ſee the Sun ſo may Thouſand Times bigger than the Earth; I ſee him circulating in a Space, in Compariſon of which, he is himſelf but a bright Atom. I ſee other Stars, perhaps ſtill bigger than he, that roll in other Regions, ſtill farther diſtant from us. Beyond thoſe Regions, which eſcape all Meaſure, I ſtill confuſedly perceive other Stars, which can neither be counted nor diſtinguiſh'd. The Earth, on which I ſtand, is but one Point, in Proportion to the Whole, in which no Bound can ever be found. The Whole is ſo well put together, that not one ſingle Atom can be put out of its Place, without unhinging this immenſe Machine; and it moves in

in ſuch excellent Order, that its very Motion perpetuates its Variety and Perfection. Sure it muſt be the Hand of a Being, that does every Thing without any Trouble, that ſtill keeps ſteddy, and governs this great Work for ſo many Ages; and whoſe Fingers *play with the Univerſe*, to ſpeak with the Scripture. *Ludens in Orbe terrarum.*

Sect. XXI.

Wonders of the Infinitely Little.

ON the other Hand, the Work is no leſs to be admired in Little, than in Great: For I find as well in Little as in Great, a kind of Infinite that aſtoniſhes me. It ſurpaſſes my Imagination, to find in a Hand-worm, as one does in an Elephant or Whale, Limbs perfectly well Organized; a Head, a Body, Legs, and Feet, as diſtinct and as well form'd as thoſe of the biggeſt Animals. There are in every Part of thoſe Living Atoms, Muſcles, Nerves, Veins, Arteries, Blood; and in that Blood ramous Particles, and Humours; in theſe

Humours ſome Drops that are themſelves compoſed of ſeveral Particles: Nor can one ever ſtop in the Diſcuſſion of this infinite Compoſition of ſo infinite a Whole.

The Microſcope diſcovers to us in every Object, as it were a Thouſand other Objects that had eſcap'd our Notice. But how many other Objects are there in every Object diſcover'd by the Microſcope, which the Microſcope it ſelf cannot diſcover? What ſhould not we ſee if we could ſtill ſubtilize and improve more and more the Inſtruments, that help out weak and dull Sight? Let us ſupply by our Imagination what our Eyes are defective in; and let our Fancy it ſelf be a kind of Microſcope, and repreſent to us in every Atom a Thouſand new and inviſible Worlds: But it will never be able inceſſantly to paint to us new Diſcoveries in little Bodies; it will be tired, and forced at laſt to ſtop, and ſink, leaving in the ſmalleſt Organ of a Body, a Thouſand Wonders undiſcover'd.

SECT.

Sect. XXII.

Of the Structure *or* Frame *of the* Animal.

LET us confine our ſelves within the Animal's Machine, which has Three Things that never can be too much admired: *Firſt*, It has in it wherewithal to defend it ſelf againſt thoſe that attack it, in order to deſtroy it. *Secondly*, It has a Faculty of reviving it ſelf by Food. *Thirdly*, It has wherewithal to perpetuate its Species by Generation. Let us beſtow ſome Conſiderations on theſe Three Things.

Sect. XXIII.

Of the Instinct *of the* Animal.

ANimals are endow'd with what is call'd *Inſtinct*, both to approach uſeful and beneficial Objects, and to avoid ſuch as may be noxious and deſtructive to them. Let us not inquire wherein this Inſtinct conſiſts, but content our ſelves with

Matter of Fact, without Reaſoning upon it.

The tender Lamb ſmells his Dam afar off, and runs to meet her. A Sheep is ſeiz'd with Horror at the Approach of a Wolf, and flies away before he can diſcern him. The Hound is almoſt infallible in finding out a Stag, a Buck, or a Hare, only by the Scent. There is in every Animal an impetuous Spring, which, on a ſudden, gathers all the Spirits; diſtends all the Nerves; renders all the Joints more ſupple and pliant; and increaſes in an incredible manner, upon ſudden Dangers, his Strength, Agility, Speed, and Cunning, in order to make him avoid the Object that threatens his Deſtruction. The Queſtion in this Place is not to know, whether Beaſts are endow'd with Reaſon or Underſtanding: For I do not pretend to engage in any Philoſophical inquiry. The Motions I ſpeak of are intirely Indeliberate, even in the Machine of Man. If, for Inſtance, a Man that dances on a Rope, ſhould, at that Time, reaſon on the Laws and Rules of *Equilibrium*, his Reaſoning

Reaſoning would make him loſe that very *Equilibrium*, which he preſerves admirably well without arguing upon the Matter; and Reaſon would then be of no other Uſe to him but to throw him on the Ground. The ſame happens with Beaſts; Nor will it avail any Thing to object, that they reaſon as well as Men; for this Objection does not in the leaſt weaken my Proof; And their Reaſoning can never ſerve to account for the Motions we admire moſt in them. Will any one affirm that they know the niceſt Rules of Mechanicks, which they obſerve with perfect Exactneſs, whenever they are to run, leap, ſwim, hide themſelves, double, uſe ſhifts to avoid purſuing Hounds, or to make uſe of the ſtrongeſt Part of their Bodies to defend themſelves? Will he ſay that they naturally underſtand the Mathematicks, which Men are ignorant of? Will he dare to advance, that they perform with Deliberation and Knowledge all thoſe impetuous and yet ſo exact Motions, which even Men perform without Study or Premeditation? Will he allow

allow them to make uſe of Reaſon in thoſe Motions, wherein 'tis certain Man does not? 'Tis an Inſtinct, will he ſay, that Beaſts are govern'd by. I grant it: For 'tis, indeed, an Inſtinct. But this Inſtinct is an admirable Sagacity and Dexterity, not in the Beaſts, who neither do, nor can then have Time, to reaſon; but in the ſuperior Wiſdom that governs them. That Inſtinct, or Wiſdom that thinks, and watches for Beaſts, in indeliberate Things, wherein they could neither watch nor think, even ſuppoſing them to be as reaſonable as we, can be no other than the Wiſdom of the Artificer that made theſe Machines. Let us therefore talk no more of *Inſtinct* or *Nature*; which are but fine empty Names, in the Mouth of the Generality that pronounce them. There is in what they call *Nature* and *Inſtinct*, a ſuperior Art, and Contrivance, of which Humane Invention is but a Shadow. What's beyond all Queſtion is, That there are in Beaſts a prodigious Number of Motions entirely indeliberate, and which, yet

yet are perform'd according to the niceſt Rules of Mechanicks. 'Tis the Machine alone that follows thoſe Rules: Which is a Fact independent from all Philoſophy; and Matter of Fact is ever deciſive. What would a Man think of a Watch that ſhould fly or ſlip away, turn again, or defend it ſelf, for its own Preſervation, if he went about to break it? Would he not admire the Skill of the Artificer? Could he be induced to believe that the Springs of that Watch had form'd, proportion'd, ranged, and united themſelves, by mere Chance? Could he imagine that he had clearly explain'd and accounted for ſuch induſtrious and skilful Operation, by talking of the *Nature* and *Inſtinct* of a Watch, that ſhould exactly ſhew the Hour to his Maſter, and ſlip away from ſuch as ſhould go about to break its Springs to Pieces?

SECT.

SECT. XXIV.

Of FOOD.

WHAT's more noble than a Machine which continually repairs, and renews it ſelf? The Animal, ſtinted to his own Strength, is ſoon tired and exhauſted by Labour: But the more he takes Pains, the more he finds himſelf preſs'd to make himſelf Amends for his Labour, by more plentiful Feeding. Aliments daily reſtore the Strength he had loſt. He puts into his Body another Subſtance that becomes his own, by a Kind of Metamorphoſis. At firſt it is pounded, and being changed into a Liquor, it purifies, as if it were ſtrain'd thro' a Sieve, in order to ſeparate any Thing that's groſs from it; afterwards it arrives at the Center, or *Focus* of the Spirits, where it is ſubtiliz'd, and becomes Blood. And ruuning, at laſt, and penetrating through numberleſs Veſſels to moiſten all the Members, it filtrates in the Fleſh, and becomes it ſelf Fleſh. So many Aliments, and Liquors of various Colours, are then

no

no more than one and the ſame Fleſh; and Food which was but an Inanimate Body, preſerves the Life of the Animal, and becomes Part of the Animal himſelf; the other Parts of which he was compoſed being exhaled by an inſenſible and continual Tranſpiration. The Matter which, for Inſtance, was Four Years ago ſuch a Horſe, is now but Air, or Dung. What was then either Hay, or Oats, is become that ſame Horſe, ſo fiery, and vigorous: At leaſt, he is accounted the ſame Horſe, notwithſtanding this inſenſible Change of his Subſtance.

Sect. XXV.

Of Sleep.

THE natural Attendant of Food is Sleep; in which the Animal forbears not only all his outward Motions, but alſo all the Principal inward Operations, which might too much ſtir and diſſipate the Spirits. He only retains Reſpiration, and Digeſtion; ſo that all Motions that might

might wear out his Strength are ſuſpended, and all ſuch as are proper to recruit and renew it, go on freely of themſelves. This Repoſe, which is a Kind of Inchantment, returns every Night, while Darkneſs interrupts and hinders Labour. Now, who is it that contrived ſuch a Sufpenſion? Who is it that ſo well choſe the Operations that ought to continue; and, with ſo juſt Diſcernment, excluded all ſuch as ought to be interrupted? The Next Day, all paſt Fatigue is gone and vaniſh'd. The Animal works on, as if he had never work'd before; and this Reviving gives him a Vivacity and Vigour that invites him to new Labour. Thus the Nerves are ſtill full of Spirits, the Fleſh ſmooth, the Skin whole, tho' one would think it ſhould waſte and tear: The Living Body of the Animal ſoon wears out Inanimate Bodies, even the moſt ſolid that are about it; and yet does not wear out it ſelf. The Skin of a Horſe, for Inſtance, wears out ſeveral Saddles; and the Fleſh of a Child, tho' very delicate and tender, wears out many Cloaths, whilſt it daily grows ſtronger. If this Renewing of Spi-

rits

rits were perfect, it would be real Immortality, and the Gift of Eternal Youth. But the ſame being imperfect, the Animal inſenſibly loſes his Strength, decays, and grows old, becauſe every Thing that's created ought to bear a Mark of Nothingneſs from which it was drawn, and have an End.

Sect. XXVI.

Of Generation.

WHAT's more admirable, than the Multiplication of Animals? Look upon the Individuals: No Animal is immortal. Every Thing grows old; every Thing paſſes away; every Thing diſappears; every Thing, in ſhort, is annihilated. Look upon the Species: Every Thing ſubſiſts; every Thing is permanent, and immutable, tho' in a conſtant Viciſſitude. Ever ſince there have been on Earth Men that have taken care to preſerve the Memory of Events, no Lions, Tigers, Wild-Boars, or Bears, were even known

to

to form themſelves by Chance, in Caves, or Foreſts. Neither do we ſee any Fortuitous Productions of Dogs, or Cats. Bulls and Sheep are never born of themſelves, either in Stables, Folds, or on Paſture-Grounds. Every one of thoſe Animals owes his Birth to a certain Male and Female of his Species.

All thoſe different Species are preſerv'd much the ſame, in all Ages. We do not find that for Three Thouſand Years paſt, any one has periſh'd, or ceaſed; neither do we find that any one multiplies to ſuch an Exceſs as to be a Nuſance, or Inconveniency to the reſt. If the Species of Lions, Bears, and Tigers, multiply'd to a certain exceſſive Degree, they would not only deſtroy the Species of Stags, Bucks, Sheep, Goats, and Bulls; but even get the Maſtery over Mankind, and unpeople the Earth. Now who maintains ſo juſt a Meaſure, as never either to extinguiſh thoſe different Species, or never to ſuffer them to multiply too faſt?

But this continual Propagation of every Species is a Wonder with which we

we are grown too familiar. What would a Man think of a Watch-maker, who ſhould have the Art to make Watches, which, of themſelves, ſhould produce others *ad infinitum*, in ſuch a Manner that Two Original Watches ſhould be ſufficient to multiply and perpetuate their Species over the whole Earth? What would he ſay of an Architect, that ſhould have the Skill to build Houſes, which ſhould build others, to renew the Habitations of Men, before the Firſt ſhould decay and be ready to fall to the Ground? 'Tis however what we daily ſee among Animals. They are no more, if you pleaſe, than mere Machines, as Watches are: But, after all, the Author of theſe Machines has endow'd them with a Faculty to reproduce or perpetuate themſelves *ad infinitum*, by the Conjunction of Both Sexes. Affirm, if you pleaſe, that this Generation of Animals is perform'd, either by Moulds or by an expreſs Configuration of every Individual; which of theſe Two Opinions you think fit to pitch upon, it comes all to one; nor is the Skill of

the Artificer leſs conſpicuous. If you ſuppoſe that at every Generation, the Individual, without being caſt into a Mould, receives a Configuration made on purpoſe: I ask, who it is that manages and directs the Configuration of ſo compounded a Machine, and which argues ſo much Art and Induſtry? If, on the contrary, to avoid acknowledging any Art in the Caſe, you ſuppoſe that every Thing is determin'd by the Moulds: I go back to the Moulds themſelves, and ask, who is it that prepared them? In my Opinion they are ſtill greater Matter of Wonder, than the very Machines which are pretended to come out of them.

Therefore let who will ſuppoſe that there were Moulds in the Animals that lived Four Thouſand Years ago, and affirm, if he pleaſes, that thoſe Moulds were ſo incloſed one within another *ad infinitum*, that there was a ſufficient Number for all the Generations of thoſe Four Thouſand Years; and that there is ſtill a ſufficient Number ready prepared for the Formation of all the Animals that ſhall preſerve their Species in all ſucceeding

ceeding Ages. Now, theſe Moulds which, as I have obſerv'd, muſt have all the Configuration of the Animal, are as difficult to be explain'd, or accounted for, as the Animals themſelves: And are beſides attended with far more unexplicable Wonders. 'Tis certain that the Configuration of every individual Animal requires no more Art and Power than is neceſſary to frame all the Springs that make up that Machine; but when a Man ſuppoſes Moulds: *Firſt*, He muſt affirm, That every Mould contains in Little, with unconceivable Niceneſs, all the Springs of the Machine it ſelf: Now, 'tis beyond Diſpute, that there is more Art in making ſo compound a Work in Little, than in a larger Bulk. *Secondly*, He muſt ſuppoſe, That every Mould, which is an Individual prepared for a firſt Generation, contains diſtinctly within it ſelf, other Moulds contain'd within one another *ad infinitum*, for all poſſible Generations, in all ſucceeding Ages. Now what can be more artful, and more wonderful in Matter of Mechaniſm, than ſuch a Preparation of an infinite Number

of Individuals, all form'd, before-hand, in One from which they are to ſpring? Therefore the Moulds are of no Uſe to explain the Generations of Animals, without ſuppoſing any Art or Skill: For, on the contrary, Moulds would argue a more Artificial Mechaniſm, and more wonderful Compoſition.

What's manifeſt and undiſputable, independently from all the Syſtems of Philoſophers, is, that the fortuitous Concourſe of Atoms, never produces, without Generation, in any Part of the Earth, any Lions, Tigers, Bears, Elephants, Stags, Bulls, Sheep, Cats, Dogs, or Horſes. Theſe, and the like, are never produc'd but by the Encounter of Two of their Kind of different Sex. The Two Animals that produce a Third, are not the True Authors of the Art, that ſhines in the Compoſition of the Animal ingendred by them. They are ſo far from knowing how to perform that Art, that they do not ſo much as know the Compoſition, or Frame of the Work that reſults from their Generation. Nay, they know not ſo much as any particular Spring

of it; having been no more than blind and unvoluntary Inſtruments, made uſe of for the Performance of a Marvellous Art, to which they are abſolute Strangers, and of which they are perfectly ignorant. Now I'd fain Know, whence comes that Art, which is none of theirs? What Power and Wiſdom knows how to employ, for the Performance of Works of ſo ingenious and intricate a Deſign, Inſtruments ſo uncapable to know what they are doing, or to have any Notion of it? Nor does it avail any Thing to ſuppoſe that Beaſts are endow'd with Reaſon: Let a Man ſuppoſe them to be as rational as he pleaſes in other Things: yet he muſt own, that in Generation, they have no ſhare in the Art that's conſpicuous in the Compoſition of the Animals they produce.

Let us carry the Thing further, and take for granted the moſt wonderful Inſtances that are given of the Skill and Forecaſt of Animals. Let us admire, as much as you pleaſe, the Certainty with which a Hound takes a Spring into a Third Way, as ſoon as he finds by his

Noſe, that the Game he purſues has left no Scent in the other Two. Let us admire the Hind, who, they ſay, throws a good Way off her Young Fawn, into ſome hidden Place, that the Hounds may not find him out by the Scent of his ſtrain. Let us even admire the Spider who with her Cobwebs lays ſubtle Snares to trap Flys, and fall unawares upon them before they can diſintangle themſelves. Let us alſo admire the Hern, who, they ſay, puts his Head under his Wing, in order to hide his Bill under his Feathers, thereby to ſtick the Breaſt of the Bird of Prey that ſtoops at him. Let us allow the Truth of all theſe wonderful Inſtances of Rationality; for all Nature is full of ſuch Prodigies. But what muſt we infer from them? In good Earneſt, if we carefully examine the Matter, we'll find that they prove too much. Shall we ſay, That Animals are more rational than We? Their Inſtinct has undoubtedly more certainty than our Conjectures. They have learnt neither Logick nor Geometry: Neither have they any Courſe

or

or Method of Improvement, or any Science. Whatever they do is done of a ſudden without Study, Preparation, or Deliberation. We commit Blunders and Miſtakes every Hour of the Day after we have a long while argued and conſulted together: Whereas Animals, without any Reaſoning, or Premeditation, perform every Hour, what ſeems to require moſt Diſcernment, Choice, and Exactneſs. Their Inſtinct is in many Things, infallible: But that Word, *Inſtinct* is but a fair Name void of Sence. For what can an Inſtinct more juſt, exact, preciſe, and certain than Reaſon itſelf mean, but a more perfect Reaſon? We muſt therefore ſuppoſe a wonderful Reaſon and Underſtanding, either in the Work, or in the Artificer; either in the Machine, or in him that made it. When for Inſtance, I find that a Watch ſhews the Hours with ſuch Exactneſs as ſurpaſſes my Knowledge: I preſently conclude, that if the Watch itſelf does not reaſon, it muſt have been made by an Artificer, who, in that Particular, reaſon'd better and had more Skill than Myſelf. In

like manner, when I ſee Animals, who every Moment perform Actions that argue a more certain Art and induſtry than I am Maſter of, I immediately conclude, that ſuch marvellous Art muſt neceſſarily be either in the Machine, or in the Artificer that framed it. Is it in the Animal himſelf? But how is it poſſible he ſhould be ſo Wiſe, and ſo infallible in ſome Things? And if this Art is not in him, it muſt of neceſſity be in the Supream Artificer that made that Piece of Work, juſt as all the Art of a Watch i sin the Skill of the Watchmaker.

SECT. XXVII.

Tho' BEASTS *commit ſome* MISTAKES, *yet their Inſtinct is, in many Caſes,* INFALLIBLE.

DO not object to me, that the Inſtinct of Beaſts is in ſome Things defective, and liable to Error. 'Tis no wonder Beaſts are not infallible in every Thing, but 'tis rather a Wonder they are ſo in many Caſes. If they were infallible in every Thing,

Thing, They ſhould be endow'd with a Reaſon infinitely perfect; in ſhort, they ſhould be Deities. In the Works of an infinite Power there can be but a finite Perfection: Otherwiſe God ſhould make Creatures like, or equal to Himſelf, which is impoſſible. He therefore cannot place Perfection, nor conſequently Reaſon in his Works, without ſome Bounds, and Reſtrictions: But thoſe Bounds do not prove that the Work is void of Order or Reaſon. Becauſe I miſtake ſometimes, it does not follow, that I have no Reaſon at all, and that I do every thing by mere Chance; but only that my Reaſon is ſtinted, and imperfect. In like manner, becauſe a Beaſt is not by his Inſtinct infallible in every thing, tho' he be ſo in many, it does not follow that there is no manner of Reaſon in that Machine; but only, that ſuch a Machine has not a boundleſs Reaſon. But after all, 'tis a conſtant Truth, that in the Operations of that Machine, there is a regular Conduct, a marvellous Art, and a Skill which in many Caſes, amounts to Infallibility. Now, to whom ſhall we aſcribe this infallible

lible Skill? To the Work, or its Artificer?

SECT. XXVIII.

'Tis impoſſible BEASTS *ſhould have* SOULS.

IF you affirm that Beaſts have Souls different from their Machines, I immediately ask you, of what Nature are thoſe Souls, entirely different from, and united to Bodies. Who is it that knew how to unite them to Natures ſo vaſtly different? Who is it that has ſuch abſolute Command over ſo oppoſite Natures, as to put and keep them in ſuch a regular, and conſtant a Society, and wherein mutual Agreement and Correſpondence are ſo neceſſary and ſo quick?

If on the contrary you ſuppoſe that the ſame Matter may ſometimes think, and ſometimes not think according to the various Rangling, and Configurations it may receive; I will not tell you in this Place, that Matter cannot think; and that one cannot conceive that the Parts of a Stone, without adding any thing to it, may ever

ever know themſelves, whatever Degree of Motion, whatever Figure you may give them. I will only ask you now, wherein that preciſe Ranging and Configuration of Parts, which you ſpeak of, conſiſts? According to your Opinion there muſt be a Degree of Motion, wherein Matter does not yet reaſon, and then another much like it, wherein, on a ſudden, it begins to reaſon, and know itſelf. Now, who is it that knew how to pitch upon that preciſe Degree of Motion? Who is it that has diſcover'd the Line in which the Parts ought to move? Who is it that has meaſured the Dimenſions ſo nicely as to find out and ſtate the Bigneſs, and Figure every Part muſt have, to keep all manner of Proportions between themſelves in the Whole? Who is it that has regulated the outward Form, by which all thoſe Bodies are to be ſtinted? In a Word, who is it that has found all the Combinations, wherein Matter thinks, and without the leaſt of which, Matter muſt immediately cauſe to think? If you ſay 'tis Chance: I anſwer, that you make Chance rational to

ſuch

ſuch a Degree, as to be the Source of Reaſon it ſelf. Strange Prejudice and Intoxication of ſome Men, not to acknowledge a moſt Intelligent Cauſe, from which we derive all Intelligence; and rather chuſe to affirm, that the pureſt Reaſon, is but the Effect of the Blindeſt of all Cauſes, in ſuch a Subject as Matter, which of it ſelf, is altogether incapable of Knowledge! Certainly there's nothing a Man of Senſe would not admit, rather than ſo extravagant and abſurd an Opinion.

SECT. XXIX.

SENTIMENTS *of ſome of the* ANCIENTS, *concerning the* SOUL *and* KNOWLEDGE *of Beaſts.*

THE Philoſophy of the Ancients, tho' very lame and imperfect, had nevertheleſs a Glimpſe of this Difficulty: And therefore in order to remove it, ſome of them pretended, That the Divine Spirit, interſpers'd and ſcatter'd throughout the Univerſe, is a ſuperior Wiſdom,

dom, that continually operates in all Nature, eſpecially in Animals, juſt as Souls act in Bodies; and that this continual Impreſſion, or Impulſe of the Divine Spirit, which the Vulgar call *Inſtinct*, without knowing the True Signification of that Word, was the Life of all living Creatures. They added, That thoſe Sparks of the Divine Spirit were the Principle of all Generations; That Animals receiv'd them in their Conception, and at their Birth; and that the Moment they dy'd, thoſe Divine Particles diſengaged themſelves from all terreſtrial Matter, in order to fly up to Heaven, where they ſhone and roll'd among the Stars. 'Tis this Philoſophy, at once ſo magnificent and ſo fabulous, which *Virgil* ſo gracefully expreſſes, in the following Verſes upon Bees:

*Eſſe * quibus Partem Divinæ Mentis, & hauſtus*
Ætherios dixere: Deum namque ire per omnes
Terraſque, Tractuſque Maris, Cœlumque profundum.
Hinc Pecudes, Armenta, Viros, Genus omne Ferarum,
Quemque Sibi tenues naſcentem arceſſere Vitas.

* *Virg. Georg.* Lib. iv.

Scilicet

Scilicet huc reddi deinde, ac reſoluta referri
Omnia, nec Morti eſſe Locum, ſed viva volare
Sideris in Numerum, atque alto ſuccedere Cœlo.

That is,

'Induc'd by ſuch Examples, ſome have taught
'That Bees have Portions of Etherial Thought:
'Endu'd with Particles of Heavenly Fires:
'For GOD the whole created Maſs inſpires.
'Thro' Heav'n, and Earth, and Ocean Depth He [throws
'His Influence round, and kindles as He goes.
'Hence Flocks, and Herds, and Men, and Beaſts, [and Fowls,
'With Breath are quicken'd, and attract their Souls.

'Hence take the Forms His Preſcience did ordain,
'And into Him, at length, reſolve again.
'No Room is left for DEATH, they mount the Sky,
'And to their own congenial Planets fly.

Dryden's Virgil.

That Divine Wiſdom that moves all the known Parts of the World, had made ſo deep an Impreſſion upon

upon the *Stoicks*, and on *Plato* before them, that they believ'd the whole World to be an Animal: But a Rational, and Wiſe Animal, in ſhort, the Supreme GOD. This Philoſophy reduc'd POLYTHEISM, or the Multitude of GODS, to DEISM, or One GOD; and that One GOD to NATURE, which according to them was Eternal, Infallible, Intelligent, Omnipotent, and Divine. Thus Philoſophers, by ſtriving to keep from, and rectify the Notions of Poets, dwindled again, at laſt, into Poetical Fancies; ſince they aſſign'd as the Inventors of Fables did, a Life, an Intelligence, an Art, and a Deſign to all the Parts of the Univerſe, that appear moſt inanimate. Undoubtedly, they were ſenſible of the wonderful Art that's conſpicuous in Nature; And their only Miſtake lay in Aſcribing to the Work, the Skill of the Artificer.

SECT.

SECT. XXX.

Of MAN.

LET us not ſtop any longer with Animals inferior to Man. 'Tis high Time to conſider and ſtudy the Nature of Man himſelf, in order to diſcover Him, whoſe Image he is ſaid to bear. I know but two ſorts of Beings in all Nature: Thoſe that are endow'd with Knowledge or Reaſon, and thoſe that are not. Now Man is a Compound of theſe two Modes of Being. He has a Body, as the moſt inanimate corporeal Bodies have; And he has a Spirit, a Mind, or a Soul, that is, a Thought whereby he knows himſelf, and perceives what's about him. If it be true, that there is a Firſt Being who has drawn or created all the reſt from Nothing, Man is truly his Image; For he has, like Him, in his Nature all the real Perfection that is to be found in thoſe two various Kinds or Modes of Being. But an Image, is but

but an Image ſtill, and can be but an Adumbration or Shadow of the true Perfect Being.

Let us begin to ſtudy Man by the Contemplation of his Body. I know not, ſaid a Mother to her Children, in the Holy Writ, how you were form'd in my Womb. Nor is it, indeed, the Wiſdom of the Parents that forms ſo compounded, and ſo regular a Work. They have no ſhare in that wonderful Art; let us therefore leave them, and trace it up higher.

Sect. XXXI.

Of the Structure *of* Man's Body.

THE Body is made of Clay; But let us admire the Hand that framed and poliſh'd it. The Artificer's Seal is ſtampt upon his Work. He ſeems to have delighted in making a Maſter-Piece with ſo vile a Matter. Let us caſt our Eyes upon that Body, in which the Bones ſuſtain the Fleſh that covers them. The Nerves that are extended in it, make up all its Strengh;

and the Muſcles with which the Sinews weave themſelves, either by ſwelling, or extending themſelves, perform the moſt exact and regular Motions. The Bones are divided at certain diſtances; but they have Joints, whereby they are ſet one within another; and are tied by Nerves, and Tendants. *Cicero*, admires with Reaſon, the excellent Art with which the Bones are knit together: For what's more ſupple for all various Motions? And, on the other Hand, what's more firm and durable? Even after a Body is dead, and its Parts are ſeparated by Corruption, we find that theſe Joints and Ligaments can hardly be deſtroy'd. Thus this Humane Machine or Frame is either Strait or Crooked, Stiff or Supple, as we pleaſe. From the Brain, which is the Source of all the Nerves, ſpring the Spirits, which are ſo ſubtle, that they eſcape the Sight; and nevertheleſs ſo real, and of ſo great Activity and Force, that they perform all the Motions of the Machine, and make up all in Strength. Theſe Spirits are, in an Inſtant, convey'd

to

to the very Extremities of the Members. Sometimes they flow gently and regularly, ſometimes they move with Impetuoſity, as Occaſion requires; and they vary, *ad Infinitum*, the Poſtures, Geſtures, and other Actions of the Body.

Sect. XXXII.

Of the Skin.

LET us conſider the Fleſh. It is cover'd in certain Places with a ſoft and tender Skin, for the Ornament of the Body. If that Skin, that renders the Object ſo agreeable, and gives it ſo ſweet a Colour, were taken off, the ſame Object would become ghaſtly, and create Horror. In other Places that ſame Skin is harder and thicker, in order to reſiſt the Fatigue of thoſe Parts. As for Inſtance, how harder is the Skin of the Feet than that of the Face? And that of the hinder Part of the Head, than that of the Forehead? That Skin is all over full of Holes like a Sieve: But thoſe Holes, which are call'd

Pores, are imperſceptible. Altho' Sweat, and other Tranſpirations exhale through thoſe Pores, the Blood never runs out that way. That Skin has all the Tenderneſs neceſſary to make it tranſparent, and give the Face a lively, ſweet, and graceful Colour. If the Skin were leſs cloſe, and leſs ſmooth, the Face would look bloody, and excoriated. Now, who is that knew how to temper and mix thoſe Colours with ſuch Nicety, as to make a Carnation which Painters admire, but never can perfectly imitate?

SECT. XXXIII.

Of VEINS *and* ARTERIES.

THERE are in Man's Body numberleſs Branches of Blood-Veſſels. Some of them carry the Blood from the Center to the extream Parts, and are call'd Arteries. Through thoſe various Veſſels runs the Blood, a Liquor Soft, and Oily, and by this Oilineſs proper to retain the moſt ſubtle Spirits, juſt as the moſt ſubtle and ſpirituous Eſſences are

are preſerv'd in gummy Bodies. This Blood moiſtens the Fleſh, as Springs and Rivers water the Earth; and after it has filtrated in the Fleſh, it returns to its Source, more ſlowly, and leſs full of Spirits: But it renews, and is again ſubtiliz'd in that Source, in order to circulate without Ceaſing.

Sect. XXXIV.

Of the Bones, *and the* Jointing.

DO you conſider that excellent Order and Proportion of the Limbs? The Legs and Thighs are great Bones jointed one with another, and knit together by Nerves. They are two Sorts of Pillars, equal and regular, erected to ſupport the whole Fabrick. But thoſe Pillars fold; and the *Rotula* † of the Knee, is a Bone of a Circular Figure, which is placed on purpoſe on the Joint, in order to fill it up, and preſerve it, when the Bones fold, for the Bending of the Knee. Each Column or Pillar has its Pedeſtal, which is compos'd of various inlaid

† *Vulgarly* the Knee-pan.

Parts, ſo well jointed together, that they can either bend, or keep ſtiff, as occaſion requires. The Pedeſtal, I mean the Foot, turns, at a Man's Pleaſure, under the Pillar. In this Foot we find nothing but Nerves, Tendants, and little Bones cloſely knit, that this Part may, at once, be either more ſupple, or more firm, according to various Occaſions. Even the Toes with their Articles and Nails, ſerve to feel the Ground a Man walks on, to lean and ſtand with more Dexterity and Nimbleneſs, the better to preſerve the Equilibrium of the Body, to riſe, or to ſtoop. The Two Feet ſtretch forward, to keep the Body from falling that way, when it ſtoops, or bends. The Two Pillars are jointed together at the Top, to bear up the reſt of the Body; but are ſtill divided there in ſuch a Manner, that that Joint affords Man the Conveniency of reſting himſelf, by ſitting on the Two biggeſt Muſcles of the Body.

The Body of the Structure is proportion'd to the Height of the Pillars. It contains ſuch Parts as

are

are neceſſary for Life, and which conſequently ought to be placed in the Center, and ſhut up in the ſecureſt Place. Therefore Two Rows of Ribs pretty cloſe to one another, that come out of the Back-Bone, as the Branches of a Tree do from its Trunk, form a kind of Hoop, to hide and ſhelter thoſe noble and tender Parts. But becauſe the Ribs could not entirely ſhut up that Center of the Humane Body, without hindering the Dilatation of the Stomach and of the Entrails, they form that Hoop but to a certain Place, below which they leave an empty Space, that the Inſide may freely diſtend and ſtretch, both for Reſpiration, and Feeding.

As for the Back-Bone, all the Works of Man afford nothing ſo artfully and curiouſly wrought. It would be too ſtiff, and too frangible or brittle, if it were made of one ſingle Bone: And in ſuch a Caſe Man could never bend or ſtoop. The Author of this Machine has prevented that Inconveniency, by forming *Vertebræ*, which jointing one with another make up a Whole, con-

ſiſting of ſeveral Pieces of Bones, more ſtrong than if it were of a ſingle Piece. This Compound being ſometimes ſupple and pliant, and ſometimes ſtiff, ſtands either upright, or bends, in a Moment, as a Man pleaſes. All theſe *Vertebræ* have in the Middle a Gutter or Channel, that ſerves to convey a Continuation of the Subſtance of the Brain to the Extremities of the Body, and with ſpeed to ſend thither Spirits through that Pipe.

But who can forbear Admiring the Nature of the Bones? They are very hard; and we ſee that even the Corruption of all the reſt of the Body, after Death, does not affect them. Nevertheleſs they are full of numberleſs Holes and Cavities that make them lighter; and in the Middle they are full of the Marrow, or Pith, that is to nouriſh them. They are bored exactly in thoſe Places through which the Ligaments that knit them are to paſs. Moreover, their Extremities are bigger than the Middle, and form, as it were, two Semi-circular Heads, to make one Bone turn more eaſily with

with another, that ſo the whole may fold and bend without Trouble.

Sect. XXXV.

Of the Organs.

Within the Incloſure of the Ribs are placed in Order, all the Great Organs, ſuch as ſerve to make a Man breath; ſuch as digeſt the Aliments; and ſuch as make new Blood. Reſpiration, or Breathing is neceſſary to temper inward Heat, occaſion'd by the Boyling of the Blood, and by the impetuous Courſe of the Spirits. The Air is a Kind of Food that nouriſhes the Animal, and by Means of which he renews himſelf, every Moment of his Life. Nor is Digeſtion leſs neceſſary to prepare ſenſible Aliments towards their being changed into Blood; which is a Liquor apt to penetrate every where, and to thicken into Fleſh in the extream Parts, in order to repair in all the Members, what they loſe continually both by Tranſpiration, and the Waſte of Spirits

Spirits. The Lungs are like great Covers, which being Spungy, eaſily dilate and contract themſelves, and as they inceſſantly take in, and blow out a great Deal of Air, they form a Kind of Bellows that are in perpetual Motion. The Stomach has a Diſſolvent that cauſes Hunger, and puts Man in Mind of his Want of Food. That Diſſolvent, which ſtimulates and pricks the Stomach, does, by that very Uneaſineſs, prepare for it a very lively Pleaſure, when its Craving is ſatisfied by the Aliments. Then Man, with Delight, fills his Belly with ſtrange Matter, which would create Horror in him, if he could ſee it as ſoon as it has enter'd his Stomach, and which even diſpleaſes him, when he ſees it being already ſatisfied. The Stomach is made in the Figure of a Bag-Pipe. There the Aliments being diſſolv'd by a quick Coction, or Digeſtion, are all confounded, and make up a ſoft Liquor, which afterwards becomes a Kind of Milk, call'd *Chyle*; and which being, at laſt, brought into the Heart, receives there, through the Plenty of Spirits, the

the Form, Vivacity, and Colour of Blood. But while the pureſt Juice of the Aliments paſſes from the Stomach into the Pipes deſtin'd for the Preparation of Chyle and Blood, the groſs Particles of the ſame Aliments are ſeparated, juſt as Bran is from Flower by a Sieve; and they are dejected downwards to eaſe the Body of them, through the moſt hidden Paſſages, and the moſt remote from the Organs of the Senſes, leſt theſe be offended at them. Thus the Wonders of this Machine are ſo great and numerous, that we find ſome unfathomable, even in the moſt abject and Mortifying Functions of the Body, which Modeſty will not allow to be more particularly explain'd.

Sect. XXXVI.

Of the Inward Parts.

I Own that the inward Parts are not ſo agreeable to the Sight, as the Outward: But then be pleas'd to obſerve, they are not made to be ſeen. Nay, it was neceſſary, according

cording to Art and Deſign, that they ſhould not be diſcover'd without Horror; And that a Man ſhould not without Violent Reluctance, go about to diſcover them, by cutting open this Machine in another Man. 'Tis this very Horror that prepares Compaſſion and Humanity in the Hearts of Men, when one ſees another wounded, or hurt. Add to this, with St. *Auſtin*, that there are in thoſe inward Parts a Proportion, Order, and Mechaniſm, which ſtill pleaſe more an attentive inquiſitive Mind, than external Beauty can pleaſe the Eyes of the Body. That Inſide of Man, which is at once ſo ghaſtly and horrid, and ſo wonderful and admirable, is exactly as it ſhould be, to denote DIRT AND CLAY WROUGHT BY A DIVINE HAND: For we find in it, both the Frailty of the Creature, and the Art of the Creator.

SECT.

SECT. XXXVII.

Of the ARMS, *and their* USE.

FRom the Top of that precious Fabrick we have deſcrib'd, hang, the two *Arms*, which are terminated by the *Hands*, and which bear a perfect Symmetry one with another. The Arms are knit with the Shoulders, in ſuch a Manner, that they have a free Motion in that Joynt. They are beſides divided at the *Elbow*, and at the *Wriſt*, that they may fold, bend, and turn with Quickneſs. The Arms are of a juſt Length to reach all the Parts of the Body. They are nervous and full of Muſcles, that they may, as well as the Back, be often in Action, and ſuſtain the greateſt Fatigue of all the Body. The Hands are a Contexture of Nerves and little Bones, ſet one within another in ſuch a Manner, that they have all the Strength and Suppleneſs neceſſary, to feel the Neighbouring Bodies, to ſeize on them, hold them faſt, throw them, draw them to one, puſh them off, diſſin-

diſintangle them, and untie them one from another. The Fingers, the Ends of which are armed with Nails, are by the Delicacy and Variety of their Motions, contrived to exerciſe the moſt curious and marvellous Arts. The Arms and Hands ſerve alſo, according as they are either extended, folded, or turn'd, to poiſe the Body in ſuch a manner, as that it may ſtoop, without any Danger of Falling. The whole Machine has beſides, independently from all After-Thoughts, a Kind of Spring that poiſes it on a ſudden, and makes it find the *Equilibrium*, in all its different Poſtures and Poſitions.

SECT. XXXVIII.

Of the NECK *and* HEAD.

ABove the Body riſes the *Neck*, which is either firm, or flexible at Pleaſure. Muſt a Man bear a heavy Burden on his Head? This Neck becomes as ſtiff as if it were made up of one ſingle Bone. Has he a Mind to bow, or turn his Head? The Neck bends every Way, as

as if all its Bones were disjointed. This Neck, a little raiſed above the Shoulders, bears up with Eaſe the Head, which over-rules and governs the whole Body. If it were leſs big, it would bear no Proportion with the reſt of the Machine. And if it were bigger, it would not only be diſproportion'd and deformed, but, beſides, its Weight would both cruſh the Neck; and put Man in Danger of falling on the ſide it ſhould lean a little too much. This Head, fortified on all ſides by very thick and very hard Bones, in order the better to preſerve the precious Treaſure it encloſes, is jointed with the *Vertebræ* of the Neck, and has a very quick Communication with all the other Parts of the Body. It contains the Brain, whoſe Moiſt, Soft, and Spungy Subſtance, is made up of tender Filaments or Threads, woven together. This is the Center of all the Wonders we ſhall ſpeak of afterwards. The Skull is regularly perforated, or bored, with exact Proportion and Symmetry, for the Two *Eyes*, the Two *Ears*, the *Mouth*, and the *Noſtrils*.

There

There are Nerves deſtin'd for Senſations, that exerciſe and play in moſt of thoſe Pipes. The Noſe, which has no Nerves for its Senſation, has a *Cribri-Form*, or *Spungy-Bone*, to let Odours paſs on to the Brain. Amongſt the Organs of theſe Senſations, the Chief are double, to preſerve to one ſide what the other might happen to be defective in, by any Accident. Theſe two Organs of the ſame Senſation are ſymmetrically placed either on the Forepart, or on the Sides, that Man may uſe them with more Eaſe, to the Right, or to the Left, or right againſt him, that is to ſay, towards the Place his Joynts direct his Steps, and all his Actions. Beſides, the Flexibility of the Neck makes all thoſe Organs turn in an Inſtant which way ſoever he pleaſes. All the hinder Part of the Head, which is the leaſt able to defend it ſelf, is *therefore* the thickeſt. It is adorn'd with Hair, which at the ſame time, ſerves to fortify the Head againſt the Injuries of the Air. And, on the other Hand, the Hair likewiſe adorns the Forepart of the Head, and renders

the Face more graceful. The Face, is the Forepart of the Head, wherein the principal Senſations meet and center, with an Order and Proportion that render it very beautiful, unleſs ſome Accident or other happen to alter and impair ſo regular a Piece of Work. The two Eyes are equal, being placed about the Middle, on the two Sides of the Head, that they may, without Trouble, diſcover afar off, both on the Right and Left, all ſtrange Objects; and that they may commodiouſly watch for the Safety of all the Parts of the Body. The exact Symmetry with which they are placed, is the Ornament of the Face: And He that made them, has kindled in them, I know not what Celeſtial Flame, the like of which all the reſt of Nature does not afford. Theſe Eyes are a ſort of Looking-Glaſſes, wherein all the Objects of the whole World are painted by turns, and without Confuſion, in the Bottom of the *Retina* * that the Thinking Part of Man may ſee them in thoſe Looking-Glaſſes. But tho' we perceive all Objects by a double Organ, yet we

* Or Net-like Membrane of the Eye.

never ſee the Objects double, becauſe the Two Nerves that are Subſervient to Sight in our Eyes, are but two Branches that unite in one Pipe, as the Two Glaſſes of a Pair of Spectacles unite in the Upper Part that joins them together. The Two Eyes are adorn'd with Two equal *Eye-Brows*; and that they may open and cloſe, they are wrapp'd up with *Lids*, edg'd with Hair that defend ſo delicate a Part.

SECT. XXXIX.

Of the FOREHEAD, *and other* PARTS *of the* FACE.

THE *Forehead* gives Majeſty and Gracefulneſs to all the Face; and ſerves to heighten all its *Features*. Were it not for the Noſe which is placed in the Middle, the whole Face would look flat and deform'd; of which they are fully convinc'd who have happen'd to ſee Men, in whom that Part of the Face is mutilated. It is placed juſt above the Mouth, that it may the more eaſily diſcern, by the Odours, whatever is moſt proper to feed Man.

Man. The Two Noſtrils ſerve at once, both for the Reſpiration, and Smell. Look upon the Lips: Their lively Colour, Freſhneſs, Figure, Seat, and Proportion, with the other Features, render the Face moſt beautiful. The Mouth, by the Correſpondence of its Motions, with thoſe of the Eyes, animates, gladdens, ſuddens, ſoftens, or troubles the Face, and by ſenſible Marks expreſſes every Paſſion. The Lips not only open to receive Food, but by their Suppleneſs, and the Variety of their Motions ſerve likewiſe to vary the *Sounds* that form *Speech*. When they open, they diſcover a double Row of Teeth, with which the Mouth is adorn'd. Theſe Teeth are little Bones, ſet in order, in the Two *Jaw-Bones*, which have a Spring to open, and another to ſhut, in ſuch a manner, that the Teeth grind, like a Mill, the Aliments, in order to prepare their *Digeſtion*. But theſe Aliments thus ground go down into the Stomach, through a Pipe different from that through which we breath; And theſe Two Pipes, tho' ſo neighbouring, have nothing common.

SECT. XL

Of the TONGUE *and* TEETH.

THE Tongue is a Contexture of ſmall Muſcles and Nerves ſo very ſupple, that it winds and turns like a Serpent, with unconceivable Mobility and Pliantneſs. It performs in the Mouth the ſame Office, which either the Fingers, or the Bow of a Maſter of Muſick perform on a Muſical Inſtrument: For ſometimes it ſtrikes the Teeth, ſometimes the Roof of the Mouth. There is a Pipe * that goes into the Inſide of the Neck, call'd *Throat*, from the Roof of the Mouth to the Breaſt, which is made up of Cartilaginous Rings nicely ſet one within another, and lin'd within with a very ſmooth Membrane, in order to render the Air that's puſh'd from the Lungs more ſonorous. On the ſide of the Roof of the Mouth the End of that Pipe is open'd like a Flute, by a ſlit, that either extends, or contracts it ſelf as is neceſſary to render the Voice either big,

* *The Wind-Pipe*

big, or ſlender, hollow, or clear. But leſt the Aliments, which have their ſeparate Pipe ſhould ſlide into the *Wind-Pipe*, *I have been deſcribing*, there's a kind of *Valve* that lies on the Orifice of the Organ of the Voice, and playing like a Draw-Bridge, lets the Aliments freely paſs, through their proper Channel, but never ſuffers the leaſt Particle or Drop, to fall into the Slit of the Wind-Pipe. This ſort of Valve has a very free Motion, and eaſily turns any way: So that by ſhaking on that half-open'd Orifice, it performs the ſofteſt Modulations of the Voice. This Inſtance is ſufficient to ſhew by the by, and without entering long-winded Details of Anatomy, what a marvellous Art there is in the Frame of the inward Parts. And indeed the Organ I have deſcribed, is the moſt perfect of all Muſical Inſtruments, nor have theſe any Perfection, but ſo far as they imitate that.

SECT. XLI.

Of the SMELL, TASTE, *and* HEARING.

WHO were able to explain the Niceneſs of the Organs by which Man diſcerns the numberleſs Savours and Odours of Bodies? But how is it poſſible for ſo many different Voices to ſtrike at once my Ear, without confounding one another, and for thoſe Sounds to leave in me, after they have ceaſed to be, ſo lively, and ſo diſtinct Images of what they have been? How careful was the Artificer who made our Bodies to give our Eyes a moiſt, ſmooth, and ſliding Cover to cloſe them; and why did he leave our Ears open? Becauſe, ſays *Cicero*, the Eyes muſt be ſhut againſt the Light in order to Sleep; and, in the mean Time, the Ears ought to remain open in order to give us Warning, and wake us by the Report of Noiſe, when we are in Danger of being ſurpriz'd. Who is it that, in an Inſtant, imprints in my Eye the Heaven, the Sea, and the Earth, ſeated at almoſt an

Lib. 2. de Nat. Deor

an infinite Diſtance? How can the faithful Images of all the Objects of the Univerſe, from the Sun to an Atom, range themſelves diſtinctly in ſo ſmall an Organ? Is not the Subſtance of the Brain, which preſerves, in Order, ſuch lively Repreſentations of all the Objects that have made an Impreſſion upon us ever ſince we were in the World, a moſt wonderful Prodigy? Men admire with Reaſon the Invention of Books, wherein the Hiſtory of ſo many Events, and the Collection of ſo many Thoughts, are preſerv'd. But what Compariſon can be made between the beſt Book, and the Brain of a Learned Man? There's no Doubt but ſuch a Brain is a Collection infinitely more precious, and of a far more excellent Contrivance, than a Book. 'Tis in that ſmall Repoſitory that a Man never miſſes finding the Images he has occaſion for. He calls them: And they come; He diſmiſſes them and they ſink I know not where, and diſappear, to make Room for others. A Man ſhuts, or opens his Fancy at Pleaſure, like a Book. He

as it were, its Leaves; and, in an Inſtant, goes from one End to the other. There is even in Memory a Sort of Table, like the Index of a Book, which ſhews where certain remote Images are to be found. We do not find that theſe innumerable Characters, which the Mind of Man reads inwardly with ſo much Rapidity, leave any diſtinct Trace or Print in the Brain, when we open it. That admirable Book is but a Soft Subſtance, or a Sort of Bottom made up of tender Threads, woven one with another. Now what skilful Hand has laid up in that Kind of Dirt, which appears ſo ſhapeleſs, ſuch precious Images, rang'd with ſuch excellent and curious Art?

SECT. XLII.

Of the PROPORTION *of* MAN'S BODY.

SUCH is the Body of Man in general: For I do not enter into an Anatomical Detail; my Deſign being only to diſcover the Art that's conſpicuous in Nature, by the ſimple Caſt of

of an Eye, without any Science. The Body of Man might undoubtedly be either much bigger and taller, or much leſſer and ſmaller. But if, for Inſtance, it were but *one* Foot high, it would be inſulted by moſt Animals, that would tread and cruſh it under their Feet. If it were as tall as a high Steeple, a ſmall Number of Men would in few Days, conſume all the Aliments a whole Country affords. They could find neither Horſes, nor any other Beaſts of Burden either to carry them on their Backs, or draw them in a Machine with Wheels; Nor could they find ſufficient Quantity of Materials to build Houſes proportion'd to their Bigneſs; And as there could be but a ſmall Number of Men upon Earth, ſo they ſhould want moſt Conveniencies. Now, who is it that has ſo well regulated the Size of Man to ſo juſt a Standard? Who is it that has fix'd that of other Animals and living Creatures, with Proportion to that of Man? Of all Animals, Man only ſtands upright on his Feet; which gives him a Nobleneſs and Majeſty that diſtinguiſhes

guiſhes him, even as to the Outſide, from all that lives upon Earth. Not only his Figure is the Nobleſt, but he is alſo the ſtrongeſt and moſt dextrous of all Animals, in Proportion to his Bigneſs. Let one nicely examine the Bulk and Weight of the moſt terrible Beaſts, and he'll find, that tho' they have more Matter than the Body of a Man; yet a Vigorous Man has more Strength of Body than moſt wild Beaſts. Nor are theſe dreadful to him, except in their Teeth and Claws. But Man, who has not ſuch natural Arms in his Limbs, has yet Hands, whoſe Dexterity to make artificial Weapons, ſurpaſſes all that Nature has beſtow'd upon Beaſts. Thus Man either pierces with his Darts, or draws into his Snares, maſters, and leads in Chains, the ſtrongeſt and fierceſt Animals. Nay, he has the Skill to tame them in their Captivity, and to ſport with them as he pleaſes. He teaches Lions and Tigers to careſs him; and gets on the Back of Elephants.

SECT.

Sect. XLIII.

Of the Soul, *which alone, among all Creatures, thinks and knows.*

BUT the Body of Man, which appears to be the Maſter-Piece of Nature, is not to be compared to his Thought. 'Tis certain there are Bodies that do not think: Man, for Inſtance, aſcribes no Knowledge to Stone, Wood, or Metals, which undoubtedly are Bodies. Nay, it is ſo natural to believe that Matter cannot think, that all unprejudic'd Men cannot forbear Laughing, when they hear any one aſſert, that Beaſts are but mere Machines; becauſe they cannot conceive that mere Machines can have ſuch Knowledge as they pretend to perceive in Beaſts. They think it to be like Children's playing, and talking to their Puppets, the Aſcribing any Knowledge to mere Machines. Hence it is, that the Ancients themſelves, who knew no real Subſtance but the Body, pretended however, that the Soul of Man was a Fifth Element, or a ſort of Quinteſſence without Name, unknown

known here below, indiviſible, immutable, and altogether Celeſtial and Divine: Becauſe they could not conceive, that the terreſtial Matter of the Four Elements could think, and Know itſelf: *Ariſtoteles quintam quandam Naturam cenſet eſſe, è quâ ſit Mens. Cogitare enim, et providere, et diſcere, et docere..... in horum quatuor Generum nullo ineſſe putat; quintum Genus adhibet vacans Nomine.*

Cic. Tuſc. Quæſt. Lib. 1.

SECT. XLIV.

MATTER *cannot think.*

BUT let us ſuppoſe whatever you pleaſe, for I will not enter the Liſts with any Sect of Philoſophers: Here's an Alternative which no Philoſopher can avoid. Either Matter can become a Thinking Subſtance, without adding any thing to it; or Matter cannot think at all, and ſo what thinks in us is a Subſtance Diſtinct from Matter, and which is united to it. If Matter can acquire the Faculty of Thinking, without adding any thing to it, it muſt, at leaſt, be

be own'd, that all Matter does not think, and that even ſome Matter that now thinks, did not think Fifty Years ago; As for Inſtance, the Matter of which the Body of a young Man is made up, did not think ten years before he was born. It muſt then be concluded, that Matter can acquire the Faculty of Thinking by a Certain Configuration, Ranging, and Motion of its Parts. Let us, for inſtance, ſuppoſe the Matter of a Stone, or of a Heap of Sand. 'Tis agreed, this Part of Matter has no manner of Thought; and therefore to make it begin to think, all its Parts muſt be configurated, ranged, and moved a certain Way, and to a certain Degree, Now, who is it that knew how to find, with ſo much Niceneſs, that Proportion, Order, and Motion that Way, and to ſuch a Degree, above and below which Matter would never think? Who is it that has given all thoſe juſt, exact, and preciſe Modifications to a Vile and Shapeleſs Matter, in order to form the Body of a Child, and to render it rational by Degrees? If on the contrary

it

it be affirm'd, that Matter cannot become a thinking Subſtance, without adding ſomething to it, and that another Being muſt be united to it: I ask, what will that other Thinking Being be, whilſt the Matter, to which it is united, only moves. Therefore, here are two Natures or Subſtances very unlike and diſtinct. We know one by Figures, and local Motions only; As we do the other by Perceptions and Reaſonings. The one does not imply, or create the Idea of the other: For their reſpective Ideas have nothing in Common.

SECT. XLV.

Of the UNION *of the* SOUL *and Body, of which* GOD *alone can be the Author.*

BUT now, how comes it to paſs that Beings ſo unlike, are ſo intimately united together in Man? Whence comes it that certain Motions of the Body ſo ſuddenly, and ſo infallibly raiſe certain Thoughts in the Soul? Whence comes it that the Thoughts of the Soul, ſo ſuddenly and ſo infallibly, occaſion certain Motions

Motions in the Body? Whence proceeds ſo regular a Society, for Seventy or Fourſcore Years, without any Interruption? How comes it to paſs that this Union of Two Beings, and Two Operations, ſo very different, make up ſo exact a Compound, that many are tempted to believe it to be a ſimple and indiviſible Whole? What Hand had the Skill to unite and tie together theſe two Extreams and Oppoſites? 'Tis certain they did not unite themſelves by mutual Conſent: For Matter having of itſelf neither Thought nor Will, to make Terms and Conditions, it could not enter into an Agreement with the Mind. On the other Hand, the Mind does not remember that it ever made an Agreement with Matter; Nor could it be ſubjected to ſuch an Agreement, if it had quite forgot it. If the Mind had freely, and of its own accord reſolv'd to ſubmit to the Impreſſions of Matter, it would not, however, ſubject it ſelf to them but when it ſhould remember ſuch a Reſolution, which, beſides, it might alter at Pleaſure. Nevertheleſs it

is

is certain, That in ſpite of itſelf, it is dependent on the Body, and that it cannot free itſelf from its Dependance, unleſs it deſtroy the Organs of the Body by a Violent Death. Beſides, altho' the Mind had voluntarily ſubjected itſelf to Matter, it would not follow, that Matter were reciprocally ſubjected to the Mind. The Mind would, indeed, have certain Thoughts, when the Body ſhould have certain Motions; But the Body would not be determin'd to have, in its Turn, certain Motions, as ſoon as the Mind ſhould have certain Thoughts. Now it is moſt certain that this Dependance is reciprocal. Nothing is more abſolute than the Command of the Mind over the Body. The Mind Wills: And, inſtantly, all the Members of the Body are in Motion, as if they were acted by the moſt powerful Machines. On the other hand, nothing is more manifeſt than the Power and Influence of the Body over the Mind. The Body is in Motion: And, inſtantly, the Mind is forc'd to think either with Pleaſure or Pain, upon certain Objects. Now,

what

what Hand equally powerful over theſe two Divers and Diſtinct Natures, has been able to bring them both under the ſame Yoke, and hold them captive in ſo exact and inviolable a Society? Will any Man ſay, 'twas Chance? If he does, will he be able either to underſtand what he means, or to make it underſtood by others? Has Chance by a Concourſe of Atoms, hook'd together the Parts of the Body with the Mind? If the Mind can be hook'd with ſome Parts of the Body, it muſt have Parts itſelf, and conſequently be a perfect Body: In which Caſe, we relapſe into the Firſt Anſwer, which I have already confuted. If on the contrary, the Mind has no Parts, nothing can hook it with thoſe of the Body; nor has Chance wherewithall to tie them together.

In ſhort, my Alternative ever returns, and is peremptory and deciſive. If the Mind and Body are a Whole made up of Matter only, how comes it to paſs that this Matter, which Yeſterday did not, has this Day begun to think? Who is it that has beſtow'd upon it what

it had not, and which is, without Compariſon, more noble than Thoughtleſs Matter? What beſtows Thought upon it, has it not itſelf, and how can it give what it has not? Let us even ſuppoſe, that Thought ſhould reſult from a certain Configuration, Ranging and Degree of Motion, a certain Way, of all the Parts of Matter: What Artificer has had the Skill to find out all thoſe juſt, nice, and exact Combinations, in order to make a Thinking Machine? If on the Contrary the Mind and Body are Two diſtinct Natures; What Power Superior to thoſe Two Natures has been able to unite and tie together, without the Mind's Aſſent, or ſo much as its knowing which Way that Union was made? Who is it, that, with ſuch abſolute and Supreme Command, over-rules both Minds and Bodies, and keeps them in Society and Correſpondence, and under a ſort of Incomprehenſible Policy?

SECT.

Sect. XLVI.

The Soul *has an* Absolute Command *over the* Body.

BE pleas'd to obſerve, That the Command of my Mind over my Body is ſupreme and abſolute in its bounded Extent, ſince my ſingle Will, without any Effort, or Preparation, cauſes all the Members of my Body, to move on a ſudden and immediately, according to the Rules of Mechanicks. As the Scripture gives us the Character of God, who ſaid after the Creation of the Univerſe, *Let there be Light, and there was Light:* In like manner, the inward Word of my Soul alone, without any Effort, or Preparation, makes what it ſays. I ſay, for Inſtance, within my ſelf, through that inward, ſimple, and momentaneous Word, *Let my Body move, and it moves.* At the Command of that ſimple and intimate Will, all the Parts my Body are at Work. Immediately all Nerves are diſtended; all the Springs haſten to concur together; and the

whole Machine obeys, juſt as if every one of the moſt ſecret of thoſe Organs, heard a ſupreme, and Omnipotent Voice. This is certainly the moſt ſimple and moſt effectual Power that can be conceiv'd. All the other Beings within our Knowledge, afford not the like Inſtance of it; and this is preciſely what Men that are ſenſible and perſuaded, of a DEITY, aſcribe to it, in all the Univerſe.

Shall I aſcribe it to my feeble Mind, or rather to the Power it has over my Body, which is ſo vaſtly different from it? Shall I believe that my Will has that ſupreme Command of it own Natue; tho' in itſelf ſo weak and imperfect? But how comes it to paſs that among ſo many Bodies, it has that Power over no more than one? For no other Body moves according to its Deſires. Now, who is it that gave over one Body, the Power it had over no other? Will any Man be again ſo bold as to aſcribe this to Chance?

SECT.

SECT. XLVII.

The POWER *of the* SOUL *over the* BODY, *is not only* SUPREME *or* ABSOLUTE, *but* BLIND, *at the ſame Time.*

BUT that Power which is ſo ſupreme and abſolute, is blind, at the ſame Time. The moſt ſimple and ignorant Peaſant knows how to move his Body, as well as a Philoſopher the moſt skill'd in Anatomy. The Mind of a Peaſant commands his Nerves, Muſcles and Tendants, which he knows not, and which he never heard of; He finds them, without knowing how to diſtinguiſh them, or knowing where they lie; he calls preciſely upon ſuch as he has occaſion for; nor does he miſtake one for 'tother. If a Rope Dancer, for Inſtance, does but will, the Spirit inſtantly run with Impetuouſneſs, ſometimes to certain Nerves, ſometimes to others; all which diſtend, or ſlacken in due Time. Ask him which of them he ſet a-going, and which way he begun to move them? He will not ſo much

as underſtand what you mean. He is an abſolute Stranger to what he has done in all the inward Springs of his Machine. The Lute-Player, who is perfectly well accquainted with all the Strings of his Inſtrument, who ſees them with his Eyes, and touches them one after another with his Fingers, yet miſtakes them ſometimes. But the Soul that governs the Machine of Man's Body, moves all its Springs in Time, without ſeeing or diſcerning them; without being acquainted with their Figure, Situation, or Strength, and yet it never miſtakes. What Prodigy is here! My Mind commands what it knows not, and cannot ſee; what neither has, nor is capable of any Knowledge: And yet it is infalibly obey'd. How much Blindneſs, and how much Power at once is here! The Blindneſs is Man's; But the Power whoſe is it? To whom ſhall we aſcribe it unleſs it be to him, who ſees what Man does not ſee, and performs in him what paſſes his Underſtanding? 'Tis to no purpoſe my Mind is willing to move the Bodies that ſurround it, and which

it

it knows very diſtinctly; For none of them ſtirs; and it has not Power to move the leaſt Atom by its Will. There is but one ſingle Body, which ſome ſuperior Power, muſt have made its Property. With reſpect to this Body, my Mind is but Willing, and all the Springs of that Machine, which are unknown to it, move in Time, and in concert, to obey him. St. *Auſtin* who made theſe Reflections has expreſs'd them excellently well. 'The inward Parts of our 'Bodies, ſays he, cannot be living 'but by our Souls: But our Souls 'animate them far more eaſily than 'they can know them —— The 'Soul knows not the Body which 'is ſubject to it —— It does not 'know, why it does not move the 'Nerves, but when it pleaſes; and 'why, on the contrary, the Pulſation of Veins goes on without Interruption, whether the Mind will 'or no. It knows not which is 'the firſt Part of the Body it moves 'immediatly, in order thereby to 'move all the reſt —— It does not 'know why it feels in ſpite of it 'ſelf, and moves the Members only

'when it pleaſes. 'Tis the Mind 'does theſe Things in the Body: 'But how comes it to paſs, it nei-'ther knows what ſhe does, nor 'in what manner it performs it? 'Thoſe who learn Anatomy, con-'tinues that Father, are taught by 'others what paſſes within, and is 'perform'd by themſelves. Why, '*ſays he*, do I know, without being 'taught that there is in the Sky, 'at a prodigious Diſtance from me, 'a Sun and Stars: and why have 'I occaſion for a Maſter to learn 'where Motion begins? — When 'I move my Finger, I know not 'how what I perform within my 'ſelf, is perform'd. We are too far 'above, and cannot comprehend our 'ſelves.

SECT. XLVIII.

The SOVEREIGNTY *of the* SOUL *over the* BODY *principally appears in the* IMAGES *imprinted in the the* BRAIN.

'TIS certain, we cannot ſufficiently admire either the abſolute Power of the Soul over corporeal

real Organs which ſhe knows not, or the continual Uſe it makes of them without diſcerning them. That Sovereignty principally appears with reſpect to the Images imprinted in our Brain. I know all the Bodies of the Univerſe that have made any Impreſſion on my Senſes for a great many Years paſt. I have diſtinct Images of them, that repreſent them to me, inſomuch that I believe I ſee them, even when they exiſt no more. My Brain is like a Cloſet full of Pictures, which ſhould move and ſet themſelves in order at the Maſter's Pleaſure. Painters with all their Art and Skill, never attain but an imperfect Likeneſs: Whereas the Pictures I have in my Head are ſo faithful, that 'tis by conſulting them, I perceive all the Defects of thoſe made by Painters, and correct them within my ſelf. Now, do theſe Images, more like their Original than the Maſter-Pieces of the Art of Painting, imprint themſelves, in my Head without any Art? Is my Brain a Book, all the Characters of which have ranged themſelves, of their own accord? If there be

be any Art in the Caſe, it does not proceed from me: For I find within me that Collection of Images, without having ever ſo much as thought either to imprint them, or ſet them in order. Moreover, all theſe Images either appear, or retire as I pleaſe, without any Confuſion: I call them back: And they return. I diſmiſs them: and they ſink I know not where. They either aſſemble, or ſeparate, as I pleaſe: But I neither know where they lie, nor what they are. Nevertheleſs I find them always ready. The Agitation of ſo many Images, Old and New, that revive, join, or ſeparate, never diſturbs a certain Order that's amongſt them. If ſome of them do not appear at the firſt Summons: At leaſt I'm certain they are not far off. They may lurk in ſome deep Corner: But I am not totally ignorant of them, as I am of Things I never knew; for, on the contrary, I know confuſedly what I look for. If any other Image offers itſelf in the Room of that I call'd for, I immediately diſmiſs it, telling it: 'Tis not you I have occaſion for. But then

then where lie Objects half-forgotten? They are preſent within me, ſince I look for them there, and find them at laſt. Again, in what manner are they there, ſince I look for them a long while in Vain? What becomes of them? 'I am no 'more, ſays St. *Auſtin*, what I was, 'when I had the Thoughts I cannot find again. I know not con-'tinues that Father, either how it 'comes to paſs, that I am thus 'withdrawn from and deprived of 'my ſelf; or how I am afterwards 'brought back, and reſtor'd to my 'ſelf. I am, as it were, another 'Man, and carried to another Place, 'when I look for, and do not find, 'what I had truſted to my Me-'mory. In ſuch a Caſe, we can-'not reach, and are, in a manner, 'Strangers remote from our ſelves. 'Nor do we come at us, but when 'we find what we are in queſt of. 'But where is it we look for, but 'within us? Or what is it we look 'for, but Our ſelves? —— So un-'fathomable a Difficulty aſtoniſhes 'us! I diſtinctly remember I have known, what I do not know at preſent.

ſent. I remember my very Oblivion. I call to Mind the Pictures or Images of every Perſon, in every Period of Life wherein I have ſeen them formerly: So that the ſame Perſon paſſes ſeveral Times in my Head. At firſt, I ſee one a Child, then a Young, and afterwards an Old Man. I place Wrinkles in the ſame Face, in which, on the other ſide, I ſee the tender Graces of Infancy. I join what ſubſiſts no more with what is ſtill, without confounding theſe Extremes. I preſerve I know not what, which, by Turns, is all that I have ſeen ſince I came into the World. Out of this unknown Store come all the Perfumes, Harmonies, Taſtes, Degrees, and Mixtures of Colours; in ſhort, all the Figures that have paſs'd thro' my Senſes, and which they have truſted to my Brain. I revive when I pleaſe, the Joy I felt Thirty Years ago. It returns: But ſometimes it is not the ſame it was formerly, and appears without rejoicing me. I remember I have been well pleaſed: And yet am not ſo while I have that Remembrance. On the other hand, I renew paſt Sorrows and Troubles. They

They are preſent: For I diſtinctly perceive them ſuch as they were formerly, and not the leaſt Part of their Bitterneſs, and lively Senſe, eſcapes my Memory: But yet they are no more the ſame; they are dull'd, and neither trouble nor diſquiet me. I perceive all their Severity without feeling it: Or if I feel it, 'tis only by Repreſentation, which turns a former Smart and racking Pain, into a Kind of Sport and Diverſion; for the Image of paſt Sorrows rejoices me. It is the ſame with Pleaſures: A vertuous Mind is afflicted by the Memory of its Diſorderly Unlawful Enjoyments. They are preſent: For they appear with all their ſofteſt and moſt flattering Attendants; but they are no more themſelves, and ſuch Joys return only to make us uneaſy.

Sect. XLXI.

Two Wonders *of the* Memory *and* Brain.

HERE therefore are two Wonders equally incomprehenſible. The firſt, that my Brain is a Kind of

of Book, that contains a Number almoſt infinite of Images, and Characters ranged in an Order I did not contrive, and of which Chance could not be the Author. For I never had the leaſt Thought either of Writing any Thing in my Brain, or to place in any Order the Images and Characters I imprinted in it. I had no other Thought but only to ſee the Objects that ſtruck my Senſes. Neither could Chance make ſo marvellous a Book: Even all the Art of Man is too imperfect ever to reach ſo high a Perfection, Therefore what Hand had the Skill to compoſe it?

The ſecond Wonder I find in my Brain, is to ſee that my Mind reads with ſo much Eaſe, whatever it pleaſes, in that inward Book; and reads even Characters it does not know. I never ſaw the Traces or Figures imprinted in my Brain, and even the Subſtance of my Brain it ſelf, which is like the Paper of that Book, is altogether unknown to me. All thoſe numberleſs Characters tranſpoſe themſelves, and afterwards reſume their Rank and Place to obey my

my Command. I have, as it were, a divine Power over a Work I am unacquainted with, and which is uncapable of Knowledge, That which underſtands nothing, underſtands my Thought and performs it inſtantly. The Thought of Man has no Power over Bodies: I am ſenſible of it by running over all Nature. There is but one ſingle Body which my bare Will moves, as if it were a DEITY; and even moves the moſt ſubtle and niceſt Springs of it, without knowing them. Now, who is it that united my Will to this Body, and gave it ſo much Power over it?

SECT. L.

The MIND *of Man is mix'd with* GREATNESS *and* WEAKNESS. *Its* GREATNESS *conſiſts in Two Things.*

Firſt, *The Mind has the* IDEA *of the* INFINITE.

LET us conclude theſe Obſervations by a ſhort Reflection on the Eſſence of our Mind; in which I find an incomprehenſible Mixture of Greatneſs and Weakneſs. Its Greatneſs

neſs is real: For it brings together the paſt and the preſent, without Confuſion; and by its Reaſoning penetrates into Futurity. It has the Idea both of Bodies, and Spirits. Nay it has the Idea of the Infinite: For it ſuppoſes and affirms all that belongs to it, and rejects and denies all that is not proper to it. If you ſay that the Infinite is triangular; the Mind will anſwer without Heſitation, that what has no Bounds can have no Figure. If you deſire it to aſſign the Firſt of the Units that make up an Infinite Number; it will readily anſwer, That there can be no Beginning, End, or Number in the Infinite; becauſe if one could find either a Firſt or Laſt Unit in it, one might add ſome other Unit to that, and conſequently encreaſe the Number. Now a Number cannot be infinite, when it is capable of ſome Addition, and when a Limit may be aſſign'd to it, on the Side where it may receive an Increaſe.

SECT.

Sect. LI.

The Mind *knows the* Finite *only by the* Idea *of the* Infinite.

TIS even in the Infinite that my Mind knows the Finite. When we ſay a Man is ſick, we mean a Man that has no Health; and when we call a Man weak, we mean one that has no Strength. We know Sickneſs, which is a Privation of Health, no other Way but by repreſenting to us Health it ſelf as a real Good, of which ſuch a Man is depriv'd; and, in like manner, we only know Weakneſs, by repreſenting to us Strength as a real Advantage, which ſuch a Man is not Maſter of. We know Darkneſs, which is nothing real, only by denying, and conſequently by conceiving Day-Light, which is moſt real, and moſt poſitive. In like manner we know the Finite only by aſſigning it a Bound, which is a meer Negation of a greater Extent; and conſequently only the Privation of the Infinite. Now a Man could never repreſent to himſelf the

Privation of the Infinite, unleſs he conceiv'd the Infinite itſelf: Juſt as he could not have a Notion of Sickneſs, unleſs he had an Idea of Health, of which it is only a Privation. Now, whence comes that Idea of the Infinite in us?

SECT. LII.

Secondly, *The* IDEAS *of the Mind are* UNIVERSAL, ETERNAL, *and* IMMUTABLE.

OH! How great is the Mind of Man! He carries within him wherewithal to aſtoniſh, and infinitely to ſurpaſs himſelf: Since his Ideas are univerſal, eternal, and immutable. They are univerſal: For when I ſay, it is impoſſible to be and not to be; the Whole is bigger than a Part of it; a Line perfectly circular has no Strait Parts; between Two Points given the Strait Line is the ſhorteſt; the Center of a Perfect Circle is equally diſtant from all the Points of the Circumference; an Equilateral Triangle has no Obtuſe, or Right Angle: All theſe Truths admit of no

no Exception. There never can be any Being, Line, Circle, or Triangle, but according to theſe Rules. Theſe Axioms are of all Times, or to ſpeak more properly, they exiſt before all Time, and will ever remain after any comprehenſible Duration. Let the Univerſe be turn'd topſy turvy, deſtroy'd, and annihilated; and even let there be no Mind to reaſon about Beings, Lines, Circles, and Triangles: Yet it will ever be equally true in it ſelf, that the ſame Thing cannot at once, be and not be; that a Perfect Circle can have no Part of a Strait Line; that the Center of a Perfect Circle cannot be nearer one Side of the Circumference than the other. Men may, indeed, not think actually on theſe Truths: and it might even happen, that there ſhould be neither Univerſe, nor any Mind capable to reflect on theſe Truths: But nevertheleſs they are ſtill conſtant and certain in themſelves, altho' no Mind ſhould be acquainted with them; juſt as the Rays of the Sun would not ceaſe being real, altho' all Men ſhould be blind, and no Body have Eyes to be ſenſible of their Light. By af-

firming that Two and Two make Four, ſays St. *Auſtin* *, a Man is not only certain that he ſpeaks Truth, but he cannot doubt that ſuch a Propoſition was ever equally true, and muſt be ſo eternally. Theſe Ideas we carry within our ſelves have no Bounds, and cannot admit of any. It cannot be ſaid, that what I have affirmed about the Center of perfect Circles, is true only in relation to a certain Number of Circles: For that Propoſition is true, thro' evident Neceſſity, with reſpect to all Circles *ad Infinitum*. Theſe unbounded Ideas can never be chang'd, alter'd, impair'd, or defaced in us: For they make up the very Eſſence of our Reaſon. Whatever Effort a Man may make in his own Mind, yet it is impoſſible for him ever to entertain a ſerious Doubt about the Truths which thoſe Ideas clearly repreſent to us. For Inſtance, I never can ſeriouſly call in Queſtion, whether the Whole is bigger than one of its Parts; or whether the Center of a Perfect Circle is equally diſtant from all the Points of the Circumference. The Idea of the Infinite is in me like that of

* *Lib.* 2. *de Lib. arb.*

of Numbers, Lines, Circles, a Whole, and a Part. The changing our Ideas, would be, in Effect, the annihilating Reaſon it ſelf. Let us judge and make an Eſtimate of our Greatneſs, by the immutable infinite Stamp within us, and which can never be defaced from our Minds. But leſt ſuch a real Greatneſs ſhould dazzle, and betray us, by flattering our Vanity, lets haſten to caſt our Eyes on our Weakneſs.

Sect. LIII.

Weakness *of* Man's Mind.

THAT ſame Mind that inceſſantly ſees the Infinite; and, through the Rule of the Infinite, all Finite Things; is likewiſe infinitely ignorant of all the Objects that ſurround it. It is altogether ignorant of it ſelf; and gropes about, in an Abyſs of Darkneſs. It neither knows what it is, nor how it is united with a Body; nor which Way it has ſo much Command over all the Springs of that Body, which it knows not. It is ignorant of its own Thoughts and Wills. It knows not,

with Certainty, either what it believes, or wills. It often fancies to believe and will, what it neither believes nor wills. It is liable to miſtake, and its greateſt Excellence is to acknowledge it. To the Error of its Thoughts, it adds the Diſorder and Irregularity of its Will and Deſires; ſo that it is forc'd to groan, in the Conſciouſneſs and Experience of its Corruption. Such is the Mind of Man, weak, uncertain, ſtinted, full of Errors. Now, who is it that put the Idea of the Infinite, that is to ſay of Perfection, in a Subject ſo ſtinted, and ſo full of Imperfection? Did it give it ſelf ſo ſublime, and ſo pure an Idea, which is it ſelf a Kind of Infinite in Imagery? What Finite Being diſtinct from it, was able to give it what bears no Proportion with what is Limited within any Bounds? Let us ſuppoſe the Mind of Man to be like a Looking-Glaſs, wherein the Images of all the Neighbouring Bodies imprint themſelves: Now what Being was able to ſtamp within us the Image of the Infinite, if the Infinite never exiſted? Who can put in a Looking Glaſs the Image of a Chimerical

Chimerical Object, which is not in Being, and which was never placed againſt the Glaſs? This Image of the Infinite is not a confuſed Collection of Finite Objects, which the Mind may miſtake for a true Infinite. 'Tis the True Infinite of which we have the Thought and Idea. We know it ſo well, that we exactly diſtinguiſh it from whatever it is not; and that no Subtilty can palm upon us any other Object in its Room. We are ſo well acquainted with it, that we reject from it any Propriety that denotes the leaſt Bound or Limit. In ſhort, we know it ſo well, that 'tis in it alone we know all the reſt, juſt as we know the Night by the Day; Sickneſs by Health. Now, once more, whence comes ſo great an Image? Does it proceed from Nothing? Can a Stinted Limited Being imagine and invent the Infinite, if there be no Infinite at all? Our weak and ſhort-ſighted Mind cannot of it ſelf form that Image, which, at this rate, ſhould have no Author. None of the Outward Objects can

give us that Image: For they can only give us the Image of what they are, and they are limited and imperfect. Therefore from whence ſhall we derive that diſtinct Image which is unlike any Thing within us, and all we know here below, without us? Whence does it proceed? Where is that Infinite we cannot comprehend, becauſe it is really Infinite: And which nevertheleſs we cannot miſtake, becauſe we diſtinguiſh it from any Thing that's inferior to it? Sure it muſt be ſomewhere, otherwiſe how could it imprint it ſelf in our Minds?

SECT. LIV.

The IDEAS *of Man are the immutable* RULES *of his* JUDGMENT.

BUT beſides the Idea of the Infinite, I have yet univerſal and immutable Notions, which are the Rule and Standard of all my Judgments; inſomuch, that I cannot judge of any Thing but by conſulting them; nor am I free to judge contrary to what they repreſent to me.

me. My Thoughts are ſo far from being able to correct, or form that Rule, that they are themſelves corrected, in ſpite of my ſelf, by that Superior Rule; and invincibly ſubjected to its Deciſion. Whatever Effort my Mind can make, I can never be brought, as I obſerv'd before, to entertain a Doubt, whether Two and Two make Four; whether the Whole is bigger than one of its Parts; or whether the Center of a perfect Circle be equally diſtant from all the Points of the Circumference. I am not free to deny thoſe Propoſitions; and if I happen to deny thoſe Truths, or others much like them, there is in me ſomething above my ſelf, which forces me to return to the Rule. That fix'd and immutable Rule, is ſo inward and intimate, That I am tempted to take it for my ſelf: But it is above me, ſince it corrects, and rectifies me; gives me a Diſtruſt of my ſelf, and makes me ſenſible of my Impotency. 'Tis ſomething that inſpires me every moment, provided I hearken to it, and I never err or miſtake except when

when I am not attentive to it. What inſpires me would for ever preſerve me from Error, if I were docile, and acted without Precipitation: For that inward Inſpiration would teach me to judge aright of Things within my reach, and about which I have occaſion to form a Judgment. As for others, it would teach me, not to judge of them at all; which ſecond Leſſon is no leſs important than the firſt. That inward Rule is what I call MY REASON: But I ſpeak of *My Reaſon* without penetrating into the Extent of thoſe Words, as I ſpeak of NATURE and INSTINCT, without knowing what thoſe Expreſſions mean.

SECT. LV.

What MAN'S REASON *is.*

'TIS certain my Reaſon is within me; For I muſt continually recollect my ſelf to find it. But the ſuperior Reaſon that corrects me upon occaſion, and which I conſult, is none of mine, nor is it Part of my ſelf. That Rule is perfect

fect and immutable; whereas I am changeable and imperfect. When I err, it preſerves its Rectitude. When I am undeceived, it is not ſet right, for it never was otherwiſe; and ſtill keeping to Truth has the Authority to call, and bring me back to it. 'Tis an inward Maſter that makes me either be ſilent, or ſpeak; believe, or doubt; acknowledge my Errors, or confirm my Judgments. I am inſtructed by hearkening to it; whereas I err and go aſtray, when I hearken to my ſelf. That Maſter is every where, and his Voice is heard, from one End of the Univerſe to the other, by all Men as well as me. Whilſt he corrects and rectifies me in *France*, he corrects and ſets right other Men in *China*, *Japan*, *Mexico*, and in *Peru*, by the ſame Principles.

Sect. LVI.

Reason *is the* Same *in all* Men, *of all* Ages *and* Countries.

TWO Men who never ſaw, or heard of one another, and who

who never entertain'd any Correſpondence with any other Man that could give them common Notions, yet ſpeak, at two Extremities of the Earth, about a certain Number of Truths, as if they were in Concert. 'Tis infallibly known before Hand in one Hemiſphere, what will be anſwer'd in the other upon theſe Truths. Men of all Countries and of all Ages, whatever their Education may have been, find themſelves invincibly ſubjected and obliged to think, and ſpeak in the ſame manner. The Maſter who inceſſantly teaches us, makes all of us think the ſame Way. Whenever we haſtily judge, without hearkening to his Voice, in Diffidence of our ſelves, we think, and utter Dreams full of Extravagance. Thus what appears moſt to be Part of our ſelves, and our very Eſſence, I mean our Reaſon, is leaſt our own, and what on the contrary, ought to be accounted moſt borrow'd. We continually receive a Reaſon ſuperior to us, as we inceſſantly breath the Air, which is a foreign Body; or as we inceſſantly ſee all the Objects near us by the Light

of

of the Sun, whoſe Rays are Bodies foreign to our Eyes. That ſuperior Reaſon over-rules and governs, to a certain Degree, with an abſolute Power, all Men, even the leaſt rational, and makes them all ever agree, in ſpite of themſelves, upon thoſe Points. 'Tis ſhe that makes a Savage in *Canada* think about a great many Things, juſt as the *Greek* and *Roman* Philoſophers did. 'Tis ſhe that made the *Chineſe* Geometricians find out much the ſame Truths with the *Europeans*, whilſt thoſe Nations ſo very remote, were unknown one to another. 'Tis ſhe that makes People in *Japan* conclude as in *France*, that Two and Two make Four; nor is it apprehended, that any Nation ſhall ever change their Opinion about it. 'Tis ſhe that makes Men think now-a-days about certain Points, juſt as Men thought about the ſame Four Thouſand Years ago. 'Tis ſhe that gives uniform Thoughts to the moſt jealous and jarring Men, and the moſt irreconcileable among themſelves. 'Tis 'by Her that Men of all Ages and Countries, are, as it were, chain'd about

about an unmoveable Center, and held in the Bonds of Amity by certain invariable Rules, call'd FIRST PRINCIPLES, notwithſtanding the Infinite Variations of Opinions, that ariſe in them from their Paſſions, Avocations, and Caprices, which over-rule all their other leſs-clear Judgments. 'Tis through Hope that Men, as depraved as they are, have not yet preſum'd openly to beſtow on VICE the Name of VIRTUE, and that they are reduced to diſſemble being juſt, ſincere, moderate, benevolent, in order to gain one another's Eſteem. The moſt wicked and abandon'd of Men, cannot be brought to eſteem what they wiſh they could eſteem, or to deſpiſe what they wiſh they could deſpiſe. 'Tis not poſſible to force the Eternal Barrier of Truth and Juſtice. The inward Maſter, call'd Reaſon, intimately checks the Attempt with abſolute Power, and knows how to ſet Bounds to the moſt impudent Folly of Men. Tho' Vice has for many Ages reign'd with unbridled Licentiouſneſs, Virtue is ſtill call'd Virtue; and the moſt Brutiſh and raſh

raſh of her Adverſaries cannot yet deprive her of her Name. Hence it is that Vice, tho' triumphant in the World, is ſtill obliged to diſguiſe it ſelf, under the Mask of Hypocriſy, or ſham Honeſty, to gain the Eſteem it has not the Confidence to expect, if it ſhould go bare-faced. Thus notwithſtanding its Impudence, it pays a forced Homage to Virtue, by endeavouring to adorn it ſelf with her faireſt Outſide, in order to receive the Honour and Reſpect ſhe commands from Men. 'Tis true Virtuous Men are expos'd to Cenſure; and they are, indeed, ever reprehenſible in this Life, through their natural Imperfections: But yet the moſt Vicious cannot totally efface in themſelves the Idea of true Virtue. There never was yet any Man upon Earth, that could prevail either with others, or himſelf, to allow, as a receiv'd Maxim, that to be knaviſh, paſſionate, and miſchievous, is more honourable than to be honeſt, moderate, good-natured, and benevolent.

SECT.

SECT. LVII.

REASON *in Man is* INDEPENDENT *of and above him.*

I Have already evinc'd that the inward and univerſal Maſter, at all Times, and in all Places, ſpeaks the ſame Truths. We are not that Maſter: Tho' 'tis true, we often ſpeak, without, and higher than him. But then we miſtake, ſtutter, and do not ſo much as underſtand our ſelves. We are even afraid of being made ſenſible of our Miſtakes, and we ſhut up our Ears, leſt we ſhould be humbled by his Corrections. Certainly the Man who is apprehenſive of being corrected and reproved by that uncorruptible Reaſon, and ever goes aſtray when he does not follow it, is not that perfect, univerſal, and immutable Reaſon, that corrects him, in ſpite of himſelf. In all Things we find, as it were, two Principles within us. The one gives: The other receives; the one fails, or is defective: The other makes up; the one miſtakes: The

The other rectifies; the one goes awry, through his Inclination, the other ſets him right. 'Twas the miſtaken, and ill-underſtood Experience of this, that led the *Marcionites* and *Manicheans* into Error. Every Man is conſcious within himſelf of a limited and inferior Reaſon, that goes aſtray and errs, as ſoon as it gets looſe from an entire Subordination, and which mends its Error no other way, but by returning under the Yoke of another ſuperior, univerſal, and immutable Reaſon. Thus every Thing within us argues an inferior, limited, communicated, and borrow'd Reaſon, that wants every Moment to be rectified by another. All Men are rational by means of the ſame Reaſon that communicates it ſelf to them, according to various Degrees. There is a certain Number of Wiſe Men; But the Wiſdom from which they draw theirs, as from an inexhauſtible Source, and which makes them what they are, is but One.

SECT. LVIII.

'Tis the PRIMITIVE *Truth, that lights all Minds, by communicating it ſelf to them.*

WHERE is that Wiſdom? Where is that Reaſon, at once both common and ſuperior to all Limited and Imperfect Reaſons of of Mankind? Where is that Oracle, which is never ſilent, and againſt which all the vain Prejudices of Men cannot prevail? Where is that Reaſon which we have ever Occaſion to conſult, and which prevents us to create in us the Deſire of hearing its Voice? Where is that lively Light *which lighteth every Man that cometh into the World?* Where is that pure and ſoft Light, which not only lights thoſe Eyes that are open, but which opens Eyes that are ſhut; cures ſore Eyes; gives Eyes to thoſe that have none to ſee it; in ſhort, which raiſes the Deſire of being lighted by it, and gains even their Love, who were afraid to ſee it? Every Eye ſees it; nor would it ſee any Thing, unleſs it ſaw it; ſince 'tis by that Light, and its

its pure Rays that the Eye ſees every Thing. As the ſenſibler Sun in the Firmament lights all Bodies; ſo the Sun of Intelligence lights all Minds. The Subſtance of a Man's Eye is not the Light: On the contrary the Eye borrows, every Moment, the Light from the Rays of the Sun. Juſt in the ſame manner, my Mind is not the Primitive Reaſon, or Univerſal and Immutable Truth; but only the Organ thro' which that Original Light paſſes, and which is lighted by it. There is a Sun of Spirits that lights them far better than the viſible Sun lights Bodies. This Sun of Spirits gives us, at once, both its Light, and the Love of it, in order to ſeek it. That Sun of Truth leaves no manner of Darkneſs; and ſhines at the ſame Time in the Two Hemiſpheres. It lights us as much by Night, as by Day; nor does it ſpread its Rays outwardly; but inhabits in every one of us. A Man can never deprive another Man of its Beams. One ſees it equally, in whatever Corner of the Univerſe he may lurk. A Man never needs ſay to another; *Step aſide, to let me ſee that Sun: You*

rob me of its Rays; you take away my Share of it. That Sun never ſets: Nor ſuffers any Cloud, but ſuch as are raiſed by our Paſſions. 'Tis a Day without Shadow. It lights the Savages even in the deepeſt and darkeſt Caves; none but Sore Eyes wink againſt its Light; nor is there indeed any Man ſo diſtemper'd and ſo blind, but who ſtill walks by the Glimpſe of ſome duskiſh Light he retains from that inward Sun of Conſciences. That univerſal Light diſcovers and repreſents all Objects to our Minds; nor can we judge of any Thing but by it; juſt as we cannot diſcern any Body but by the Rays of the Sun.

SECT. LIX.

'Tis by the LIGHT *of* PRIMITIVE TRUTH, *a Man judges whether what one ſays to him, be true or falſe.*

MEN may ſpeak and diſcourſe to us in order to inſtruct us: But we cannot believe them any farther, than we find a certain Conformity or Agreement between what they

they ſay, and what the inward Maſter ſays. After they have exhauſted all their Arguments, we muſt ſtill return, and hearken to him, for a final Deciſion. If a Man ſhould tell us, that a Part equals the Whole of which it is a Part, we ſhould not be able to forbear laughing, and inſtead of perſwading us, he would make himſelf ridiculous to us. 'Tis in the very Bottom of our ſelves, by conſulting the Inward Maſter, that we muſt find the Truths that are taught us, that is, which are outwardly propoſed to us. Thus, properly ſpeaking, there is but one True Maſter, who teaches all, and without whom one learns nothing. Other Maſters always refer and bring us back to that inward School where he alone ſpeaks. 'Tis there we receive what we have not; 'tis there we learn what we were ignorant of; and find what we had loſt by Oblivion. 'Tis in the intimate Bottom of our ſelves, he keeps in ſtore for us certain Truths, that lie, as it were, bury'd, but which revive upon Occaſion; and 'tis there, in ſhort, that we reject the Falſhood we

we had embraced. Far from judging that Maſter, 'tis by him alone we are judg'd peremptorily in all Things. He is a Judge diſintereſted, impartial, and ſuperior to us. We may, indeed, refuſe hearing him, and raiſe a Din to to ſtun our Ears: But when we hear him 'tis not in our Power to contradict him. Nothing is more unlike Man than that inviſible Maſter that inſtructs and judges him with ſo much Severity, Uprightneſs, and Perfection. Thus our limited, uncertain, defective, fallible Reaſon, is but a feeble and momentaneous Inſpiration of a primitive, ſupreme, and immutable Reaſon, which communicates it ſelf with Meaſure, to all Intelligent Beings.

SECT.

SECT. LX.

The SUPERIOR REASON *that reſides in Man is* GOD HIMSELF; *and whatever has been above diſcover'd to be in Man, are evident Footſteps of the* DEITY.

IT cannot be ſaid that Man gives himſelf the Thoughts he had not before; much leſs can it be ſaid, that he receives them from other Men: Since 'tis certain, he neither does, nor can admit any Thing from without, unleſs he finds it in his own Bottom, by conſulting within him the Principles of Reaſon, in order to examine whether what he is told, is agreeable or repugnant to them. Therefore there is an inward School, wherein Man receives what he neither can give himſelf, nor expect from other Men, who live upon Truſt as well as himſelf. Here then are Two Reaſons I find within me; one of which is my ſelf, the other is above me. That which is my ſelf is very imperfect, prejudiced, liable to Error, changeable, head-ſtrong, ignorant, and limited; in ſhort, it poſſeſſes nothing but what is borrow'd.

The other is common to all Men, and ſuperior to them: It is perfect, eternal, immutable, ever ready to communicate it ſelf in all Places, and to rectify all Minds that err and miſtake; in ſhort, incapable of ever being either exhauſted or divided, altho' it communicates it ſelf to all who deſire it. Where is that perfect Reaſon, which is ſo near me, and yet ſo different from me? Where is it? Sure it muſt be ſomething real; for Nothing or Nought cannot either be perfect, or make perfect imperfect Natures. Where is that ſupreme Reaſon? Is it not the very GOD I look for?

SECT. LXI.

New ſenſible NOTICES *of the* DEITY *in* MAN, *drawn from the Knowledge he has of* UNITY.

I Still find other Traces, or Notices of the DEITY within me: Here's a very ſenſible one. I am acquainted with prodigious Numbers, with the Relations that are between them: Now, how come I by that

Knowledge? It is ſo very diſtinct, that I cannot ſeriouſly doubt of it; and ſo, immediately, without the leaſt Heſitation, I rectify any Man that does not follow it in Computation. If a Man ſays 17 and 3 make 22, I preſently tell him 17 and 3 make but 20; and he is immediately convinc'd by his own Light, and acquieſces in my Correction. The ſame Maſter, who ſpeaks within me to correct him, ſpeaks at the ſame Time within him, to bid him acquieſce. Theſe are not Two Maſters that have agreed to make us agree: 'Tis ſomething indiviſible, eternal, immutable, that ſpeaks at the ſame Time, with an invincible Perſwaſion in us both. Once more, how come I by ſo juſt a Notion of Numbers? All Numbers are but repeated Units. Every Number is but a Compound, or a Repetition of Units. The Number of Two for Inſtance, is but Two Units; the Number of Four is reducible to *One* repeated Four Times. Therefore we cannot conceive any Number without conceiving Unity, which is the eſſential Foundation of any poſſible Number;

S. Aug. l. 2 de Lib. Arb.

Number; Nor can we conceive any Repetition of Units, without conceiving Unity it ſelf, which is its Baſis.

But which way can I know any real Unit? I never ſaw, nor ſo much as imagin'd any by the Report of my Senſes. Let me take, for inſtance, the moſt ſubtle Atom: It muſt have a Figure, Length, Breadth, and Depth; a Top and a Bottom; a Left and a Right Side; And again, the Top is not the Bottom, nor one Side, the Other. Therefore this Atom is not truly One; for it conſiſts of Parts. Now a Compound is a real Number, and a Multitude of Beings. 'Tis not a real Unit; but a Collection of Beings, one of which is not the other. I therefore never learnt by my Eyes, my Ears, my Hands, nor even by my Imagination, that there is in Nature any real *Unity*; on the Contrary, neither my Senſes, nor my Imagination, ever preſented to me any Thing but what is a Compound, a real Number or a Multitude. All Unity continually eſcapes me; it flies me, as it were by a Kind of Inchantment.

Inchantment. Since I look for it in ſo many Diviſions of an Atom, I certainly have a diſtinct Idea of it; and 'tis only by its ſimple and clear Idea, that I arrive, by the Repetition of it, at the Knowledge of ſo many other Numbers. But ſince it eſcapes me in all the Diviſſions of the Bodies of Nature, it clearly follows that I never came by the Knowledge of it, through the Canal of my Senſes and Imagination. Here therefore is an Idea which is in me independently from the Senſes, Imagination, and Impreſſions of Bodies.

Moreover, altho' I would not frankly acknowledge that I have a clear Idea of Unity, which is the Foundation of all Numbers, becauſe they are but Repetitions, or Collections of Units: I muſt, at leaſt, be forc'd to own, that I know a great many Numbers with their Proprieties, and Relations. I know, for Inſtance, how much make 900000000 join'd with 800000000 of another Sum. I make no Miſtake in it; and I ſhould, with Certainty, immediatly rectify any

Man

Man that ſhould. Nevertheleſs, neither my Senſes, nor my Imagination were ever able to repreſent to me diſtinctly all thoſe Millions put together. Nor would the Image they ſhould repreſent to me, be more like Seventeen Hundred Millions, than a far inferior Number. Therefore, how came I by ſo diſtinct an Idea of Numbers, which I never could either feel, or imagine? Theſe Ideas independent upon Bodies, can neither be corporeal, nor admitted in a Corporeal Subject. They diſcover to me the Nature of my Soul, which admits what's incorporeal and receives it within it ſelf, in an incorporeal Manner. Now, how came I by ſo incorporeal an Idea of Bodies themſelves? I cannot by my own Nature carry it within me: Since what in me knows Bodies is incorporeal; and ſince it knows them, without receiving that Knowledge through the Canal of Corporeal Organs, ſuch as the Senſes and Imagination. What thinks in me muſt be as it were, a Nothing of Corporeal Nature. How was I able to know Beings

that

that have by Nature no relation with my Thinking Being? Certainly, a Being ſuperior to thoſe Two Natures ſo very different, and which comprehends them both in its Infinity, muſt have join'd them in my Soul; and given me an Idea of a Nature intirely different from that which thinks in me.

SECT. LXII

The IDEA *of the* UNITY *proves that there are* IMMATERIAL SUBSTANCES; *and that there is a* BEING PERFECTLY ONE, *who is* GOD.

AS for Units, ſome, perhaps, will ſay, that I do not know them by the Bodies, but only by the Spirits; and therefore that my Mind being one, and truly known to me, 'tis by it, and not by the Bodies, I have the Idea of Unity. But to this I anſwer.

It will, at leaſt, follow from thence, that I know Subſtances that have no manner of Extenſion, or Diviſibility, and which are preſent. Here are already Beings purely incorporeal. First, *That there are immaterial Subſtances.*

real, in the Number of which I ought to place my Soul. Now, who is it that has united it to my Body? This Soul of mine is not an infinite Being; it has not been always; and it thinks within certain Bounds: Now, again, who makes it know Bodies ſo different from it? Who gives it ſo great a Command over a certain Body; and who gives reciprocally to that Body ſo great a Command over the Soul? Moreover, which way do I know whether this Thinking Soul, is really one, or whether it has Parts? I do not ſee this Soul. Now, will any Body ſay that 'tis in ſo inviſible, and ſo impenetrable a Thing, that I clearly ſee what Unity is? I am ſo far from learning by my Soul what the being One is, that, on the contrary, 'tis by the clear Idea I have already of Unity, that I examine whether my Soul be one, or diviſible.

Secondly, *That there is a Being perfectly one*, viz. *GOD ALONE.*

Add to this, that I have within me a clear Idea of a perfect Unity, which is far above that I may find in my Soul. The latter is often conſcious that ſhe is divided between Two contrary Opinions, Inclinations,

clinations, and Habits. Now, does not this Diviſion which I find within my ſelf ſhew and denote a kind of Multiplicity, and Compoſition of Parts? Beſides, the Soul has, at leaſt, a ſucceſſive Compoſition of Thoughts, one of which is moſt different and diſtinct from another. I conceive an Unity infinitely more One, if I may ſo ſpeak. I conceive a Being who never changes his Thoughts, who always thinks all Things at once, and in which no Compoſition, even ſucceſſive, can be found. Undoubtedly 'tis the Idea of the perfect and ſupreme Unity, that makes me ſo inquiſitive after ſome Unity in Spirits, and even in Bodies. This Idea ever preſent within me, is innate or inborn with me; it is the perfect Model by which I ſeek every where ſome imperfect Copy of the Unity. This Idea of what is one, ſimple, and indiviſible by Excellence, can be no other than the Idea of God. I therefore know God with ſuch Clearneſs and Evidence, that 'tis by knowing him I ſeek in all Creatures, and in my ſelf, ſome Image and Likeneſs of his

Unity.

Unity. The Bodies have, as it were, ſome Mark or Print of that Unity, which ſtill flies away in the Diviſion of its Parts; and the Spirits have a greater Likeneſs, of it, altho' they have a ſucceſſive Compoſition of Thoughts.

SECT. LXIII.

DEPENDANCE *and* INDEPENDANCE *of* MAN. *His* DEPENDANCE *proves the* EXISTENCE *of his* CREATOR.

BUT here's another Myſtery, which I carry within me, and which makes me incomprehenſible to my ſelf, *viz.* That, on the one Hand, I am Free, and on the other, Dependent. Let us examine theſe Two Things, and ſee whether 'tis poſſible to reconcile them.

I am a dependent Being. Independency is the ſupreme Perfection. To be by one's ſelf, is to carry within one's ſelf, the Source or Spring of one's own Being; or which is the ſame, 'tis to borrow nothing from any Being different from one's ſelf. Suppoſe a Being that

that has all the Perfections you can imagine, but which has a Borrow'd and Dependent Being: And you'll find him to be leſs perfect than another Being in which you'd ſuppoſe but bare Independency. For there is no Compariſon to be made between a Being that exiſts by himſelf, and a Being who has nothing of his own, nothing but what is precarious and borrow'd, and who is in himſelf, as it were, only upon Truſt.

This Conſideration brings me to acknowledge the Imperfection of what I call my Soul, If ſhe exiſted by herſelf, it would borrow nothing from another; ſhe would not want either to be inſtructed in her Ignorances, or to be rectify'd in her Errors. Nothing could reclaim her from her Vices, or inſpire her with Virtue; for nothing would be able to render her Will better than it ſhould have been at firſt. This Soul would ever poſſeſs whatever ſhe ſhould be capable to enjoy; nor could ſhe ever receive any Addition from Without. On the other hand, it is no leſs cer-

tain, that ſhe could not loſe any thing: For what is or exiſts by its ſelf, is always neceſſarily whatever it is. Therefore my Soul could not fall into Ignorance, Error, or Vice; or ſuffer any Diminution of Good Will: Nor could ſhe, on the other hand, inſtruct, or correct her ſelf, or become better than ſhe is. Now, I experience the contrary of all theſe. For I forget, miſtake, err, go aſtray; loſe the Sight of Truth, and the Love of Virtue; I corrupt, I diminiſh. On the other hand, I improve and increaſe by acquiring Wiſdom, and Good Will, which I never had. This intimate Experience convinces me, that my Soul is not a Being exiſting by it ſelf, and independent; that is neceſſary, and immutable in all it poſſeſſes and enjoys. Now, whence proceeds this Augmentation and Improvement of my ſelf? Who is it that can enlarge and perfect my Being, by making me better, and conſequently greater than I was?

SECT.

Sect. LXIV.

Good Will *cannot proceed but from a* Superior Being.

THE Will, or Faculty of willing, is undoubtedly a Degree of Being, and of Good, or Perfection: But Good Will, Benevolence, or Deſire of Good, is another Degree of Superior Good. For one may miſuſe Will, in order to wiſh ill, cheat, hurt, or do Injuſtice: Whereas Good Will is the Good or Right Uſe of Will it ſelf, which cannot but be good. Good Will is therefore what is moſt precious in Man. 'Tis that which ſets a Value upon all the reſt. 'Tis as it were, *The whole Man*: *Hoc enim omnis Homo*, †. Eccle. 12. 13.

I have already ſhewn, that my Will is not by it ſelf, ſince it is liable to loſe, and receive Degrees of Good, or Perfection; and likewiſe that it is a Good inferior to *Good Will*, becauſe it is better to will Good, than barely to have a Will, ſuſceptible both of Good and Evil. How could I be brought to believe, that I, a Weak, Imperfect,

Borrow'd, precarious and Dependent Being, beſtow on my ſelf the Higheſt Degree of Perfection, while it is viſible, and evident, that I derive the far Inferior Degree of Perfection from a Firſt Being? Can I imagine that GOD gives me the Leſſer Good, and that I give my ſelf the Greater without Him? How ſhould I come by that high Degree of Perfection, in order to give it my ſelf? Should I have it from Nothing, which is all my own Stock? Shall I ſay, that other Spirits, much like, or equal to mine, give it me? But ſince thoſe limited and dependent Beings like my ſelf, cannot give themſelves any thing, no more than I can, much leſs can they beſtow any thing upon another. For as they do not exiſt by themſelves, ſo they have not by themſelves any True Power, either over me, or over Things that are imperfect in me; or over themſelves. Wherefore, without ſtopping with them, we muſt go up higher, in order to find out a Firſt, Teeming, and moſt Powerful Cauſe, that is able to beſtow on my Soul the Good Will ſhe has not.

SECT.

SECT. LXV.

As a SUPERIOR BEING *is the Cauſe of all the* MODIFICATIONS *of* CREATURES, *ſo 'tis impoſſible for Man's Will, to will Good, by it ſelf, or of its own accord.*

LET us ſtill add another Reflection. That Firſt Being is the Cauſe of all the Modifications of His Creatures. *The Operation follows the Being*, as the Philoſophers are us'd to ſpeak. A Being that is dependent in the Eſſence of His Being, cannot but be dependent in all his Operations: For the Acceſſory follows the Principal. Therefore, the Author of the Eſſence of the Being, is alſo the Author of all the Modifications, or Modes of Being of Creatures. Thus GOD is the Real and Immediate Cauſe of all the Configurations, Combinations, and Motions, of all the Bodies of the Univerſe. 'Tis by Means, or upon Occaſion, of a Body He has ſet in Motion, that He moves another. 'Tis He Who created every thing, and Who does every thing in His Creatures, or Works. Now *Volition*, is the Modification of the Will

or willing Faculty of the Soul, juſt as Motion is the Modification of Bodies. Shall we affirm that God is the real, immediate and total Cauſe of the Motion of all Bodies, and that he is not equally the real and immediate Cauſe of the Good-Will of Men's Wills? Will this Modification, the moſt excellent of all, be the only one not made by GOD in his own Work, and which the Work beſtows on it ſelf independently? Who can entertain ſuch a Thought? Therefore my Good-Will which I had not Yeſterday, and which I have to Day, is not a Thing I beſtow upon my ſelf; but muſt come from Him who gave me both the *Will and the Being.*

As *to will* is a greater Perfection than barely *to be:* So *to will Good*, is more perfect than *to will.* The ſtep from Power, to a Virtuous Act, is the greateſt Perfection in Man. Power is only a Ballance, or Poiſe between Virtue and Vice, or a Suſpenſion between Good and Evil. The Paſſage, or Step to the Act, is a Deciſion or Determination for the Good, and conſequent by the Superior Good.

Good. The Power ſuſceptible of Good and Evil comes from GOD: Which we have fully evinc'd. Now, ſhall we affirm, That the deciſive Stroke, that determines to the greater Good, either is not at all, or is leſs owing to Him? All this evidently proves what the Apoſtle ſays, *viz.* That God *works both to will and to do, of his good Pleaſure.* Here's Man's Dependence: Let us look for his Liberty.

Philip. 2. 13.

SECT. LXVI.

Of MAN'S LIBERTY.

I Am free, nor can I doubt of it. I am intimately and invincibly convinc'd, that I can either will, or not will: And that there is in me a Choice not only between Willing and not Willing: But alſo between divers Wills, about the Variety of Objects that preſent themſelves. I am ſenſible, as the Scripture ſays, That I *am in the Hand of my Council*: Which alone ſuffices to ſhew me, that my Soul is not

Eccl. 15. 14.

Corporeal. All that is Body or Corporeal, does not in the leaſt determine it ſelf, and is, on the contrary, determin'd in all Things by Laws call'd Phyſical, which are neceſſary, invincible, and contrary to what I call Liberty. From thence I inferr, that my Soul is of a Nature entirely different from that of my Body. Now, who is it that was able to join by a reciprocal Union Two ſuch different Natures, and hold them in ſo juſt a Concert for all their reſpective Operations? That Tie, as we obſerv'd before, cannot be form'd but by a ſuperior Being, who comprehends and unites thoſe Two ſorts of Perfections, in his own infinite Perfection.

SECT. XLVII.

MAN'S LIBERTY *conſiſts in that his* WILL *by determining, modifies it ſelf.*

IT is not the ſame with the Modification of my Soul, which is call'd Will, and by ſome Philoſophers *Volition*, as with the Modifications of Bodies. A Body does not in the leaſt

leaſt modify it ſelf; but is modified by the ſole Power of God. It does not move it ſelf, it is moved. It does not act in any Thing: It is only acted, and actuated. Thus God is the only real and immediate Cauſe of all the different Modifications of Bodies. As for Spirits, the Caſe is different; for my Will determines it ſelf. Now, to determine one's ſelf to a Will, is to modify one's ſelf, and therefore my Will modifies it ſelf. God may prevent my Soul; But he does not give it the Will, in the ſame manner as he gives Motion to Bodies. If 'tis God who modifies me, I modify my ſelf with him; and am with him a real Cauſe of my own Will. My Will is ſo much my own, that I am only to blame, if I do not Will what I ought. When I will a Thing, 'tis in my Power not to will it: And when I do not will it, 'tis likewiſe in my Power to will it. I neither am, nor can be compell'd in my Will: For I cannot will what I actually will, in ſpite of my ſelf; ſince the Will I mean evidently excludes all manner of Conſtraint. Beſides the

the Exemption from all Compulſion, I am likewiſe free from Neceſſity. I am conſcious and ſenſible that I have, as it were, a two-edged Will, which, at its own Choice, may be either for the Affirmative or the Negative, the *Yes* or the *No*, and turn it ſelf either towards an Object, or towards another. I know no other Reaſon or Determination of my Will, but my Will it ſelf. I will a Thing becauſe I am free to will it; and nothing is ſo much in my Power, as either to will or not to will it. Altho' my Will ſhould not be conſtrain'd, yet if it were neceſſitated it would be as ſtrongly and invincibly determin'd to will, as Bodies are to move. An invincible Neceſſity would have as much Influence over the Will with Reſpect to Spirits, as it has over Motion, with reſpect to Bodies; And, in ſuch a Caſe, the Will would be no more accountable for willing, than a Body for moving. 'Tis true the Will would will what it would: But the Motion by which a Body is mov'd, is the ſame, as the Volition by which the willing Faculty wills.

If

If therefore Volition be neceſſitated as Motion, it deſerves neither more nor leſs Praiſe or Blame. For tho' a neceſſitated Will may ſeem to be a Will unconſtrain'd, yet it is ſuch a Will as one cannot forbear having, and for which he that has it, is not accountable. Nor does previous Knowledge eſtabliſh true Liberty: For a Will may be preceded by the Knowledge of divers Objects, and yet have no real Election or Choice. Nor is Deliberation, or the being in Suſpence, any more than a vain Trifle, if I deliberate between Two Counſels when I am under an actual Impotency to follow the one, and under an actual Neceſſity to purſue the other. In ſhort, there's no ſerious and true Choice between Two Objects, unleſs they be both actually ready within my Reach, ſo that I may either leave or take, which of the Two I pleaſe.

SECT.

SECT. LXVIII.

WILL *may reſiſt* GRACE, *and its* LIBERTY *is the Foundation of* MERIT *and* DEMERIT.

WHEN therefore I ſay I am Free, I mean that my Will is fully in my Power, and that even GOD Himſelf leaves me at Liberty to turn it which way I pleaſe; that I am not determin'd as other Beings; and that I determine my ſelf. I conceive that if that Firſt Being prevents me to inſpire me with a Good Will, it is ſtill in my Power *to reject* his actual Inſpiration, how ſtrong ſoever it may be; to fruſtrate its Effect; and to refuſe my Aſſent to it. I conceive likewiſe that when I reject his Inſpiration for the Good, I have the true and actual Power not to reject it: Juſt as I have the actual and immediate Power to riſe when I remain ſitting, and to ſhut my Eyes, when I have them open. Objects may indeed, ſolicite me, by all their Allurements and Agreeableneſs, to will, or deſire them.

Conc. Trid. Seſſ. 6

them. The Reaſons for willing may preſent themſelves to me with all their moſt lively and affecting Attendants; and the Supreme Being may alſo attract me by His moſt perſwaſive Inſpirations. But yet, for all this actual Attraction of Objects, Cogency of Reaſons, and even Inſpiration of a Superior Being, I ſtill remain Maſter of my Will, and am free either to will, or not to will.

'Tis this Exemption not only from all manner of Conſtraint or Compulſion, but alſo from all Neceſſity, and this Command over my own Actions, that render me inexcuſable when I will Evil, and praiſe-worthy when I will Good. In this lies *Merit* and *Demerit*; *Praiſe* and *Blame:* 'Tis this that makes either Puniſhment or Reward juſt; 'tis upon this Conſideration that Men exhort, rebuke, threaten, and promiſe. This is the Foundation of all Policy, Inſtruction, and Rules of Morality. The Upſhot of the *Merit* and *Demerit* of humane Actions, reſts upon this Baſis, *That nothing is ſo much in the Power* Aug. *Lib. de duabus Animab.*

Power of our Will, as our Will it ſelf; and that we have this FREE-WILL, *this, as it were, Two-Edged Faculty; and this elative Power between Two Counſels, which are immediately as it were within our Reach.* 'Tis what Shepherds and Husbandmen ſing in the Fields; what Merchants and Artificers ſuppoſe in their Traffick; what Actors repreſent in publick Shews; what Magiſtrates believe in their Councils; what Doctors teach in their Schools; 'tis that, in ſhort, which no Man of Senſe can ſeriouſly call in Queſtion. That Truth, imprinted in the Bottom of our Hearts, is ſuppoſed in the Practice, even by thoſe Philoſophers who would endeavour to ſhake it by their empty Speculations. The intimate Evidence of that Truth is like that of the Firſt Principles, which want no Proof; and which ſerve themſelves as Proofs to other Truths, that are not ſo clear and ſelf-evident. But, how could the Firſt Being make a Creature who is himſelf the Umpire of his own Actions?

SECT.

SECT. LXIX.

A CHARACTER *of the* DEITY, *both in the* DEPENDANCE *and* INDEPENDANCE *of Man.*

LET us now put together theſe two Truths equally certain. I am dependent upon a Firſt Being even in my own Will: And nevertheleſs I am free. What then is this dependent Liberty? How is it poſſible for a Man to conceive a Free-Will, that is given by a Firſt Being? I am free in my Will, as GOD is in His. 'Tis principally in this I am His Image, and Likeneſs. What a Greatneſs that borders upon Infinite is here! This is a Ray, of the DEITY it ſelf. 'Tis a Kind of Divine Power I have over my Will: But I am but a bare Image of that Supreme Being ſo *abſolutely* Free and Powerful.

The Image of the Divine Independance is not the Reality of what it repreſents; and *therefore* my Liberty is but a Shadow of that Firſt Being, by whom I exiſt, and act. On the one

one Hand, the Power I have of willing Evil, is, indeed, rather a Weakneſs and Frailty of my Will, than a true Power: For 'tis only a Power to fall, to degrade my ſelf, and to diminiſh my Degree of Perfection, and Being. On the other Hand, the Power I have to will Good, is not an Abſolute Power, ſince I have it not of my ſelf. Now, Liberty being no more than that Power: A Precarious and Borrow'd Power can conſtitute but a Precarious, Borrow'd, and Dependent Liberty; and therefore ſo imperfect and ſo precarious a Being cannot but be dependent. But how is he free? What profound Myſtery is here! His Liberty, of which I cannot doubt, ſhews his Perfection; and his Dependance argues the Nothingneſs from which he was drawn.

SECT.

SECT. LXX.

The SEAL *and* STAMP *of the* DEITY *in His Works.*

WE have ſeen the Prints of the DEITY, or to ſpeak more properly, the Seal and Stamp of GOD Himſelf, in all that's call'd the Works of Nature. When a Man will not enter into Philoſophical Subtilties, he obſerves, with the firſt Caſt of the Eye, a Hand, that was the firſt Mover, in all the Parts of the Univerſe, and ſet all the Wheels of the Great Machine agoing. The Heavens, the Earth, the Stars, Plants, Animals, our Bodies, our Minds: Every thing ſhews and proclaims an Order, an exact Meaſure, an Art, a Wiſdom, a Mind Superior to us, which is, as it were, the Soul of the whole World, and which leads and directs every thing to his Ends, with a gentle and inſenſible, tho' omnipotent Force. We have ſeen, as it were, the Architecture and Frame of the Univerſe; the juſt Proportion of all its Parts; and the bare Caſt of

the Eye has ſufficed us to find and diſcover even in an Ant, more than in the Sun, a Wiſdom and Power that delights to exert it ſelf in the Poliſhing and Adorning its Vileſt Works. This is obvious, without any ſpeculative Diſcuſſion, to the moſt Ignorant of Men: But what a World of other Wonders ſhould we diſcover, ſhould we penetrate into the Secrets of Phyſicks, and diſſect the inward Parts of Animals, which are framed according to the moſt perfect Mechanicks.

SECT. LXXI.

OBJECTION *of the* EPICUREANS, *who aſcribe every thing to* CHANCE, *conſider'd.*

I Hear certain Philoſophers who anſwer me, that all this Diſcourſe on the Art that ſhines in the Univerſe, is but a continued Sophiſm. 'All Nature, *will they ſay*, is for Man's 'Uſe, 'tis true: But you have no 'Reaſon to inferr from thence, that 'it was made, with Art, and on 'purpoſe, for the Uſe of Man. A 'Man

'Man muſt be ingenious in deceiving himſelf, who looks for, and thinks to find, what never exiſted. 'Tis true, *will they add*, that Man's Induſtry makes us of an infinite Number of Things that Nature affords, and are convenient for him: But Nature did not make thoſe Things on purpoſe for his Conveniency. As for Inſtance, Some Country-Fellows climb up daily, by certain craggy and pointed Rocks, to the Top of a Mountain; but yet it does not follow that thoſe Points of Rocks were cut with Art, like a Stair-Caſe, for the Conveniency of Men. In like manner, when a Man happens to be in the Fields, during a ſtormy Rain, and fortunately meets with a Cave, he uſes it, as he would do a Houſe, for Shelter: But, however, it cannot be affirm'd that this Cave was made on purpoſe to ſerve Men for a Houſe. It is the ſame with the whole World: It was form'd by Chance, and without Deſign: But Men finding it as it is, had the Art to turn and improve it to their own Uſes. Thus the Art you admire

'both in the Work and its Ar-
'tificer, is only in Men, who
'know how to make uſe of every
'thing that ſurrounds them.' This is, certainly, the ſtrongeſt Objection thoſe Philoſophers can raiſe; and I hope they'll have no Reaſon to complain, that I have weaken'd it: But it will immediately appear how weak it is in it ſelf, when cloſely examin'd. The bare Repetition of what I ſaid before will be ſufficient to demonſtrate it.

SECT. LXXII.

Anſwer to the Objection of the EPICUREANS, *who aſcribe all to* CHANCE.

WHAT would one ſay of a Man who ſhould ſet up for a ſubtil Philoſopher, or (to uſe the Modern Expreſſion) a FREE-THINKER, and who entring a Houſe ſhould maintain it was made by Chance, and that Art had not, in the leaſt, contributed to render it commodious to Men, becauſe there are Caves ſomewhat like that Houſe, which yet were

were never dug by the Art of Man? One ſhou'd ſhew to ſuch a Reaſoner all the Parts of the Houſe, and tell him, for Inſtance: *Do you ſee this great Court-Gate? It is larger than any Door, that Coaches may enter it. This Court has ſufficient Space for Coaches to turn in it. This Stair-Caſe is made up of Low Steps, that one may aſcend it with Eaſe; and turns according to the Apartments and Stories it is to ſerve. The Windows open'd at certain Diſtances, light the whole Building. They are glazed, leſt the Wind ſhould enter with the Light; but they may be open'd at Pleaſure, in order to breath a ſweet Air when the Weather is fair. The Roof is contriv'd to defend the whole Houſe from the Injuries of the Air. The Timber-Work is laid ſlanting and pointed at the Top, that the Rain and Snow may eaſily ſlide down on Both Sides. The Tiles bear one upon another, that they may cover the Timber-Work. The divers Floors ſerve to make different Stories, in order to multiply Lodgings within a ſmall Space. The Chimneys are contrived to light Fire in Winter, without ſetting the Houſe on Fire, and to let out the Smoke, leſt it ſhould offend thoſe that warm themſelves. The Apartments are diſtri-*

buted in ſuch a manner, that they be diſ-engaged from one another; that a numerous Family may lodge in the Houſe, and the one not be oblig'd to paſs through another's Room; and that the Maſter's Apartment be the Principal. There are Kitchens, Offices, Stables, and Coach-Houſes. The Rooms are furniſh'd with Beds to lie in, Chairs to ſit on, and Tables to write and eat on. Sure, ſhould one urge to that Philoſopher, *This Work muſt have been directed by ſome skilful Architect: For every Thing in it is agreeable, pleaſant, proportion'd, and commodious; and beſides, he muſt needs have had excellent Artiſts under him.* 'Not at all.....*would ſuch a Philoſopher anſwer*; 'You are ingenious in de-'ceiving your ſelf. 'Tis true this 'Houſe is pleaſant, agreeable, pro-'portion'd, and commodious: But 'yet it made it ſelf with all its Pro-'portions. Chance put together all 'the Stones in this excellent Order; 'it rais'd the Walls; jointed and laid 'the Timber-Work; cut open the 'Caſements; and placed the Stair-'Caſe. Don't believe any Humane 'Hand had any thing to do with it. 'Men only made the beſt of this

'Piece

'Piece of Work, when they found 'it ready made. They fancy it 'was made for them, becauſe they 'obſerve things in it which they know 'how to improve to their own Con-'veniency: But all they aſcribe to the 'Deſign and Contrivance of an ima-'ginary Architect, is but the Effect 'of their prepoſterous Imaginations. 'This ſo regular, and ſo well con-'triv'd Houſe, was made juſt in the 'ſame manner as a Cave; and Men 'finding it ready made to their 'Hands, make uſe of it, as they 'would in a Storm, of a Cave 'they ſhould find under a Rock, in a 'Deſart.

What Thoughts could a Man entertain of ſuch a fantaſtick Philoſopher, if he ſhould perſiſt ſeriouſly to aſſert, That ſuch a Houſe diſplays no Art? When we read the fabulous Story of *Amphion*, who by a miraculous Effect of Harmony, cauſed the Stones to riſe, and place themſelves, with Order and Symmetry, one on the Top of another, in order to form the Walls of *Thebes*, we laugh and ſport with that Poetical Fiction: But yet this very Fiction is not ſo incredi-

ble, as that which the *Free-thinking* Philoſopher we contend with, would dare to maintain. We might, at leaſt, imagine, that Harmony, which conſiſts in a Local Motion of certain Bodies, might (by ſome of thoſe ſecret Virtues, which we admire in Nature, without being acquainted with them) ſhake and move the Stones into a certain Order and in a Sort of Cadence, which might occaſion ſome Regularity in the Building. I own this Explanation both ſhocks, and claſhes with Reaſon: But yet it is leſs extravagant than what I have ſuppos'd a Philoſopher ſhould ſay. What, indeed, can be more abſurd, than to imagine Stones that hew themſelves, that go out of the Quarry, that get one on the Top of another, without leaving any empty Space; that carry with them Mortar to cement one another; that place themſelves in different Ranks for the Contrivance of Apartments; and who admit on the Top of all the Timber-Roof, with the Tiles, in order to cover the whole Work? The very Children, that can't yet ſpeak plain, would laugh, if they were ſe-

rioufly

riouſly told, ſuch a ridiculous Story.

Sect. LXXIII.

Comparison *of the* World, *with a* Regular House. *A Continuation of the Anſwer to the Objection of the* Epicureans.

BUT why ſhould it appear leſs ridiculous to hear one ſay, that the World made it ſelf, as well as that fabulous Houſe? The Queſtion is not to compare the World with a Cave without Form, which is ſuppos'd to be made by Chance: But to compare it with a Houſe, in which the moſt perfect Architecture ſhould be conſpicuous. For the Structure and Frame of the leaſt Living Creature is infinitely more artful and admirable, than the fineſt Houſe that ever was built.

Suppoſe a Traveller entring *Saida*, the Country where the ancient *Thebes*, with a Hundred Gates, ſtood formerly, and which is now a Deſart, ſhould find there Columns, Pyramids,

Pyramids, Obelisks, and Inſcriptions in unknown Characters. Would he preſently ſay: Men never inhabited this Place; No humane Hand had any Thing to do here; 'tis Chance that form'd theſe Columns, that plac'd them on their Pedeſtals, and crown'd them with their Capitals, with ſuch juſt Proportions; 'Tis Chance that ſo firmly jointed the Pieces that make up theſe Pyramids; 'Tis Chance that cut the Obelisks in one ſingle Stone, and engrav'd in them theſe Characters? Would he not, on the contrary, ſay, with all the Certainty the Mind of Man is capable of: Theſe magnificent Ruins are the Remains of a Noble and Majeſtical Architecture, that flouriſh'd in ancient *Egypt?* This is what plain Reaſon ſuggeſts, at the firſt Caſt of the Eye, or firſt Sight, and without Reaſoning. It is the ſame with the bare Proſpect of the Univerſe. A Man may by vain, long-winded, prepoſterous Reaſonings confound his own Reaſon, and obſcure the cleareſt Notions: But the ſingle Caſt of the Eye is deciſive. Such a Work as the World is, never

ver makes it ſelf of its own accord. There is more Art and Proportion, in the Bones, Tendants, Veins, Arteries, Nerves, and Muſcles, that compoſe Man's Body, than in all the Architecture of the ancient *Greeks* and *Egyptians*. The ſingle Eye of the leaſt of Living Creatures ſurpaſſes the Mechanicks of all the moſt skilful Artificers. If a Man ſhould find a Watch in the Sands of *Africa*, he would never have the Aſſurance ſeriouſly to affirm, That Chance form'd it in that wild Place; and yet ſome Men do not bluſh to ſay, That the Bodies of Animals, to the Artful Framing of which no Watch can ever be compar'd, are the Effects of the Caprices of Chance.

SECT.

SECT. LXXIV.

Another OBJECTION *of the* EPICUREANS *drawn from the* ETERNAL MOTION *of* ATOMS.

I Am not not ignorant of a Reaſoning, which the *Epicureans* may frame into an Objection. 'The 'Atoms, will they ſay, have an 'eternal Motion; Their fortuitous 'Concourſe, muſt, in that Eternity, 'have already produc'd infinite Com'binations. Who ſays infinite, ſays 'what comprehends all without 'Exception. Amongſt theſe infinite 'Combinations of Atoms which 'have already happen'd ſucceſſive'ly, all ſuch as are poſſible muſt ne'ceſſarily be found: For if there were 'but one poſſible Combination, be'yond thoſe contain'd in that Infi'nite, it would ceaſe to be a true 'Infinite: Becauſe ſomething might 'be added to it; and whatever 'may be increaſed, being limited 'on the ſide it may receive an Ad'dition, is not truely Infinite. Hence 'it follows that the Combination

'of

'of Atoms, which makes up the 'preſent Syſtem of the World, is 'one of the Combinations which 'the Atoms have had ſucceſſively: 'Which being laid as a Principle, is 'it Matter of Wonder, that the 'World is as 'tis now? It muſt 'have taken this exact Form, ſome-'what ſooner, or ſomewhat later: 'For in ſome one of theſe infinite 'Changes, it muſt, at laſt, have 'receiv'd that Combination, that 'makes it now appear ſo regular; 'ſince it muſt have had, by Turns, 'all Combinations that can be con-'ceiv'd. All Syſtems are compre-'hended in the Total of Eternity. 'There's none but the Concourſe 'of Atoms forms, and embraces, 'ſooner or later. In that infinite 'Variety of New Spectacles of Na-'ture, the preſent was form'd in its 'Turn. We find our ſelves actu-'ally in this Syſtem. The Con-'courſe of Atoms that made will, 'in Proceſs of Time, unmake it, in 'order to make others, *ad infinitum*, 'of all poſſible Sorts. This Syſtem 'could not fail having its Place, 'ſince all others, without Excepti-

'on,

'on, are to have theirs, each in its 'Turn. 'Tis in Vain one looks for 'a Chimerical Art in a Work 'which Chance muſt have made 'as it is.

'An Example will ſuffice to illu-'ſtrate this. I ſuppoſe an infinite 'Number of Combinations of the 'Letters of the Alphabet, ſucceſ-'ſively form'd by Chance. All poſ-'ſible Combinations are, undoubted-'ly, comprehended in that total, 'which is truely Infinite. Now 'tis 'certain, that *Homer's Iliad* is but 'a Combination of Letters: There-'fore *Homer's Iliad* is comprehen-'ded in that infinite Collection of 'Combinations of the Characters of 'the Alphabet. This being laid 'down as a Principle, a Man who 'will aſſign Art in the *Iliad*, will 'argue wrong. He may extol the 'Harmony of the Verſes, the Juſt-'neſs and Magnificence of the Ex-'preſſions, the Simplicity and Live-'lineſs of Images, the due Propor-'tion of the Parts of the Poem, 'its perfect Unity, and inimitable 'Conduct. He may, object, That 'Chance can never make any Thing,

'ſo

'ſo perfect; and that the utmoſt 'Effort of humane Wit is hardly 'capable to finiſh ſo excellent a 'Piece of Work: Yet all in Vain; 'for all this ſpecious Reaſoning is 'viſibly falſe. 'Tis certain, on the 'Contrary, that the fortuitous Con-'courſe of Characters, putting them 'together by Turns, with an 'infinite Variety, the preciſe Com-'bination, that compoſes the *Iliad*, 'muſt have happen'd in its Turn, 'ſomewhat ſooner, or ſomewhat 'later. It has happen'd at laſt; 'and thus the *Iliad* is perfect, with-'out the Help of any humane Art? This is the Objection fairly laid down, in its full Latitude: I deſire the Reader's ſerious and continued Attention to the Anſwers I am going to make to it.

SECT. LXXV.

ANSWERS *to the* OBJECTION *of the* EPICUREANS *drawn from the* ETERNAL MOTION *of* ATOMS.

NOTHING can be more abſurd than to ſpeak of ſucceſſive Combinations

Combinations of Atoms, infinite in Number: For the Infinite can never be, either Succeſſive, or Diviſible. Give me for Inſtance any Number, you may pretend to be infinite: And it will ſtill be in my Power to do Two Things, that ſhall demonſtrate it not to be a true Infinite. In the firſt Place, I can take an Unit from it; and, in ſuch a Caſe, it will become leſs than it was, and will certainly be finite: For whatever is leſs than the Infinite, has a Boundary or Limit on the ſide where one ſtops, and beyond which one might go. Now the Number, which is finite as ſoon as one takes from it one ſingle Unit, could not be infinite before that Diminution: For an Unit is certainty finite; and a Finite join'd with another Finite, cannot make an Infinite. If a ſingle Unit added to a finite Number, made an Infinite, it would follow from thence, that the Finite would be almoſt equal to the Infinite; than which nothing can be more abſurd. In the ſecond Place, I may add an Unit to that Number given, and conſequently encreaſe it. Now what may

may be encreas'd, is not infinite: For the Infinite can have no Bound; and what is capable of Augmentation, is bounded on the ſide a Man ſtops, when he might go further, and add ſome Units to it. 'Tis plain therefore, That no diviſible Compound, can be the true Infinite.

This Foundation being laid, all the Romance of the *Epicurean* Philoſophy diſappears and vaniſhes out of Sight, in an Inſtant. There never can be any diviſible Body, truly infinite in Extent, nor any Number, or any Succeſſion that is a true Infinite. From hence it follows, That there never can be an infinite ſucceſſive Number of Combinations of Atoms. If this Chimerical Infinite were real, I own all poſſible and conceivable Combinations of Atoms would be found in it; and that conſequently all Combinations that ſeem to require the utmoſt Induſtry would likewiſe be included in them. In ſuch a Caſe, one might aſcribe to mere Chance, the moſt marvellous Performances of Art: If one ſhould ſee Palaces built according to the moſt perfect Rules of

Architecture, curious Furniture, Watches, Clocks, and all ſort of Machines the moſt compounded, in a Deſart Iſland, he ſhould not be free reaſonably to conclude that there have been Men in that Iſland, who made all thoſe exquiſite Works. On the contrary he ought to ſay: Perhaps one of the Infinite Combinations of Atoms, which Chance has ſucceſſively made, has form'd all theſe Compoſitions in this Deſart Iſland, without the Help of any Man's Art: For ſuch an Aſſertion is a natural Conſequence of the Principles of the *Epicureans*. But the very Abſurdity of the Conſequence, ſerves to expoſe the Extravagance of the Principle they lay down. When Men, by the natural Rectitude of their common Senſe, conclude that ſuch ſort of Works cannot reſult from Chance: They viſibly ſuppoſe, tho' in a confuſed Manner, That Atoms are not eternal, and that in their fortuitous Concourſe, they had not an Infinite Succeſſion of Combinations: For if that Principle were admitted, it would no longer be poſſible ever to diſtinguiſh the

the Works of Art, from thoſe that ſhould reſult from thoſe Combinations, as fortuitous as a Throw at Dice.

Sect. LXXVI.

The Epicureans *confound the* Works *of* Art *with thoſe of* Nature.

ALL Men who naturally ſuppoſe a ſenſible Difference between the Works of Art, and thoſe of Chance, do conſequently, tho' but implicitly, ſuppoſe, that the Combinations of Atoms were not infinite; which Suppoſition is very juſt. This infinite Succeſſion of Combinations of Atoms is, as I ſhew'd before, a more abſurd Chimera, than all the Abſurdities ſome Men would explain by that falſe Principle. No Number, either ſucceſſive, or continual, can be infinite: From whence it follows, that the Number of Atoms cannot be infinite; that the Succeſſion of their various Motions, and Combinations, cannot be infinite; that the World

cannot be eternal; and that we muſt find out a preciſe and fix'd Beginning of theſe ſucceſſive Combinations. We muſt recur to a Firſt Individual, in the Generations of every Species. We muſt likewiſe find out the original and primitive Form of every Particle of Matter, that makes a Part of the Univerſe. And as the ſucceſſive Changes of that Matter, muſt be limited in Number, we muſt not admit in thoſe different Combinations, but ſuch as Chance commonly produces: Unleſs we acknowledge a Superior Being, who, with the Perfection of Art made the wonderful Works which Chance could never have made.

SECT. LXXVII.

The EPICUREANS *take whatever they pleaſe for granted, without any Proof.*

THE *Epicurean* Philoſophers are ſo weak in their Syſtem, that 'tis not in their Power to form it, or bring it to bear, unleſs one admits without Proofs, their moſt

moſt fabulous *Poſtulata* and Poſitions. In the firſt Place they ſuppoſe eternal Atoms; which is begging the Queſtion: For, how can they make out that Atoms have ever exiſted, and exiſt by themſelves? To exiſt by one's ſelf, is the ſupreme Perfection: Now, what Authority have they to ſuppoſe, without Proofs, that Atoms have in themſelves a perfect, eternal, and immutable, Being? Do they find this Perfection in the Idea they have of every Atom in particular? An Atom not being the ſame with, and being abſolutely diſtinguiſh'd from another Atom, each of them muſt have in it ſelf Eternity, and Independance with reſpect to any other Being. Once more, is it in the Idea theſe Philoſophers have of each Atom, that they find this Perfection? But let us grant them all they ſuppoſe, in this Queſtion, and even what they ought to be aſham'd to ſuppoſe: *viz.* That Atoms are eternal, ſubſiſting by themſelves, independent from any other Being, and conſequently entirely perfect.

SECT. LXXVIII.

The SUPPOSITIONS *of the* EPICUREANS *are false and chimerical.*

MUST we ſuppoſe beſides that Atoms have Motion of themſelves? Shall we ſuppoſe it out of Gayety, to give an Air of Reality to a Syſtem more chimerical than the Tales of the Fairies? Let us conſult the Idea we have of a Body. We conceive it perfectly well without ſuppoſing it to be in Motion, and repreſent it to us at Reſt; nor is its Idea in this State leſs clear; nor does it loſe its Parts, Figure, or Dimenſions. 'Tis to no Purpoſe to ſuppoſe that all Bodies are perpetually in ſome Motion, either ſenſible or inſenſible; and that tho' ſome Parts of Matter have a Leſſer Motion than others, yet the univerſal Maſs of Matter has ever the ſame Motion in its Totality. To ſpeak at this Rate is Building Caſtles in the Air, and impoſing vain Imaginations on the Belief of others: For who has told theſe Philoſophers that the Maſs of Matter has ever the ſame

ſame Motion in its Totality? Who has made the Experiment of it? Have they the Aſſurance to beſtow the Name of Philoſophy upon a raſh Fiction, which takes for granted what they never can make out? Is there no more to do than to ſuppoſe whatever one pleaſes, in order to elude the moſt ſimple, and moſt conſtant Truths? What Authority have they to ſuppoſe that all Bodies inceſſantly move, either ſenſibly or inſenſibly? When I ſee a Stone that appears motionleſs, how will they prove to me that there is no Atom in that Stone but what is actually in Motion? Will they ever impoſe upon me bare Suppoſitions, without any Semblance of Truth, for deciſive Proofs?

Sect. LXXIX.

'Tis falſly ſuppos'd that Motion *is* Essential *to* Bodies.

HOWEVER, let's go a Step further, and, out of exceſſive Complaiſance, ſuppoſe that all the Bodies in Nature are actually in Motion.

tion. Does it follow from thence that Motion is eſſential to every Particle of Matter? Beſides, if all Bodies have not an Equal Degree of Motion; if ſome move ſenſibly, and more ſwiftly than others; if the ſame Body may move ſometimes quicker, and ſometimes ſlower; if a Body that moves communicates its Motion to the neighbouring Body that was at Reſt, or in ſuch inferior Motion, that it was inſenſible: It muſt be confeſs'd that a Mode or Modification, which ſometimes increaſes, and at other times decreaſes in Bodies, is not eſſential to them. What's eſſential to a Being, is ever the ſame in it. *Neither* the Motion that varies in Bodies, and which after having increas'd, ſlackens and decreaſes to ſuch a Degree as to appear abſolutely extinct and annihilated; nor the Motion that is loſt, that is communicated, that paſſes from one Body to another as a Foreign Thing, can belong to the Eſſence of Bodies: And therefore I may conclude, that Bodies are perfect in their Eſſence, without aſcribing to them any Motion. If they have no Motion in their Eſſence, they have it only

only by Accident; and if they have it only by Accident, we muſt trace up that Accident to its true Cauſe. Bodies muſt either beſtow Motion on themſelves, or receive it from ſome other Being. It is evident they do not beſtow it on themſelves, for no Being can give what it has not in it ſelf: And we are ſenſible that a Body at Reſt ever remains motionleſs, unleſs ſome neighbouring Body happens to ſhake it. 'Tis certain therefore that no Body moves by it ſelf, and is only moved by ſome other Body that communicates its Motion to it. But how comes it to paſs that a Body can move another? What's the Reaſon that a Ball which a Man cauſes to roll on a ſmooth Table *(Billiards, for the Purpoſe)* cannot touch another without moving it? Why was it not poſſible that Motion ſhould not ever communicate it ſelf from one Body to another? In ſuch a Caſe a Ball in Motion would ſtop near another at their Meeting, and yet never ſhake it.

SECT.

SECT. LXXX.

The RULES *of* MOTION *which the* EPICUREANS *ſuppoſe, do not render it eſſential to Bodies.*

IMay be anſwer'd, that according to the Rules of Motion among Bodies, one ought to ſhake or move another. But where are thoſe Laws of Motion written, and recorded? Who both made them, and render'd them ſo inviolable? They do not belong to the Eſſence of Bodies; for we can conceive Bodies at Reſt; and we even conceive Bodies, that would not communicate their Motion to others, unleſs theſe Rules, with whoſe Original we are unacquainted, ſubjected them to it. Whence comes this, as it were, arbitrary Government of Motion, over all Bodies? Whence proceed Laws ſo ingenious, ſo juſt, ſo well adapted one to the other, and the leaſt Alteration of, or Deviation from which would, on a ſudden, overturn and deſtroy all the excellent Order we admire in the Univerſe? A Body being entirely diſtinct

ſtinct from another, is in its Nature abſolutely independent from it, in all reſpects: Whence it follows that it ſhould not receive any thing from it, or be ſuſceptible of any of its Impreſſions. The Modifications of a Body imply no neceſſary Reaſon to modify in the ſame Manner another Body, whoſe Being is entirely independent from the Being of the Firſt. 'Tis to no purpoſe to alledge, That the moſt Solid and moſt Heavy Bodies carry or force away thoſe that are leſs Big, and leſs Solid; and that according to this Rule a Great Leaden Ball ought to move a Great Ball of Ivory. We don't ſpeak of the Fact: We only inquire into the Cauſe of it. The Fact is certain; and therefore the Cauſe ought likewiſe to be certain and preciſe: Let us look for it without any manner of Prepoſſeſſion, or Prejudice. What's the Reaſon, that a Great Body carries off a Little one? The Thing might as naturally happen quite otherwiſe; for it might as well happen that the moſt ſolid Body ſhould never move any other Body; that is to ſay, Motion might be incommunicable. Nothing but Cuſtom obliges

obliges us to ſuppoſe that Nature ought to act as it does.

SECT. LXXXI.

To give a ſatisfactory Account of MOTION, *we muſt recur to the* FIRST MOVER.

MOREOVER, it has been proved that Matter cannot be either infinite, or eternal: And therefore there muſt be ſuppos'd both a Firſt Atom, by which Motion muſt have begun at a preciſe Moment, and a firſt Concourſe of Atoms, that muſt have form'd the firſt Combination. Now, I ask what Mover gave Motion to that firſt Atom, and firſt ſet the great Machine of the Univerſe agoing? It is not poſſible to elude this Home Queſtion by an endleſs Circle: For this Queſtion lying within a finite Circumference, muſt have an End at laſt; and ſo we muſt find the Firſt Atom in Motion, and the firſt Moment of that firſt Motion, together with the Firſt Mover, whoſe Hand made that firſt Impreſſion.

SECT.

SECT. LXXXII.

No LAW *of* MOTION *has its* FOUNDATION *in the* ESSENCE *of the* BODY; *and most of those* LAWS *are* ARBITRARY. †

AMONG the Laws of Motion we muſt look upon all thoſe as arbitrary, which we cannot account for by the very Eſſence of Bodies. We have already made out, that no Motion is eſſential to any Body: Wherefore all thoſe Laws, which are ſuppos'd to be eternal, and immutable, are on the contrary, arbitrary † accidental, and made without cogent Neceſſity: For there is none of them that can be accounted for by the Eſſence of Bodies.

† NB. *By* Arbitrary *the Author means*, Made at Pleaſure.

If there were any Law of Motion eſſential to Bodies, it would undoubtedly be that by which Bodies of leſs Bulk, and leſs ſolid, are moved by ſuch as have more Bulk and Solidity: And yet we have ſeen, that that very Law is not to be accounted for by the Eſſence of Bodies. There's another which might alſo ſeem very natural:

That,

That, I mean, by which Bodies ever move rather in a direct, than a crooked Line, unleſs their Motion be otherwiſe determin'd by the Meeting of other Bodies. But even this Rule has no Foundation in the Eſſence of Matter. Motion is ſo very accidental, and ſuperadded to the Nature of Bodies, that we do not find in this Nature of Bodies any primitive or immutable Law, by which they ought to move at all, much leſs to move according to certain Rules. In the ſame manner as Bodies might have exiſted, and yet have never either been in Motion, or communicated Motion one to another: So they might never have moved but in a circular Line; and this Motion might have been as natural to them as the Motion in a direct Line. Now, who is it that pitch'd upon either of theſe Two Laws equally poſſible? What is not determin'd by the Eſſence of Bodies, can have been determin'd by no other but him who gave Bodies the Motion, they had not in their own Eſſence. Beſides, this Motion in a direct Line might have been

been upwards or downwards, from Right to Left, or from Left to Right, or in a Diagonal Line. Now, who is that determin'd which Way the ſtrait Line ſhould go?

Sect. LXXXIII.

The Epicureans *can draw no* Consequence *from all their* Suppositions, *altho' the ſame ſhould be granted them.*

Let us ſtill attend the *Epicureans* even in their moſt fabulous Suppoſitions; and carry on the Fiction to the laſt Degree of Complaiſance. Let us admit Motion in the Eſſence of Bodies, and ſuppoſe, as they do, that Motion in a direct Line is alſo eſſential to all Atoms. Let us beſtow upon Atoms both a Will, and an Underſtanding, as Poets did on Rocks and Rivers. And let us allow them likewiſe to chuſe which way they will begin their ſtrait Line. Now, what Advantage will theſe Philoſophers draw from

from all I have granted them, contrary to all Evidence? In the firſt Place, all Atoms muſt have been in Motion from all Eternity; *Secondly*, They muſt all have had an equal Motion; *Thirdly*, They muſt all have moved in a direct Line; *Fourthly*, They muſt all have moved by an immutable and eſſential Law.

I am ſtill willing to gratify our Adverſaries, ſo far as to ſuppoſe that thoſe Atoms are of different Figures, for I will allow them to take for granted what they ſhould be oblig'd to prove, and for which they have not ſo much as the Shadow of a Proof. One can never grant too much to Men who never can draw any Conſequence from what is granted them: For the more Abſurdities are allow'd them, the ſooner they are caught by their own Principles.

SECT.

Sect. LXXXIV.

Atoms *cannot make any* Compound *by the Motion the* Epicureans *aſſign them.*

THESE Atoms of ſo many odd Figures, ſome round, ſome crooked, others triangular, *&c.* are by their Eſſence oblig'd always to move in a ſtrait Line, without ever deviating or bending to the Right, or to the Left: Wherefore they never can hook one another, or make together any Compound. Put, if you pleaſe, the ſharpeſt Hooks near other Hooks of the like Make: Yet if every one of them never moves otherwiſe than in a Line perfectly ſtrait, they will eternally move one near another, in Parallel Lines, without being able to join and hook one another. The Two ſtrait Lines which are ſuppos'd to be parallel, tho' immediate Neighbours, will never croſs one another, tho' carried on *ad Infinitum*: Wherefore in all Eternity, no Hooking, and conſequently no

Compound can reſult from that Motion of Atoms in a direct Line.

SECT. LXXXV.

The CLINAMEN, *Declination, or* BENDING *of* ATOMS, *is a Chimerical Notion, that throws the* EPICUREANS *into a groſs Contradiction.*

THE *Epicureans* not being able to ſhut their Eyes againſt this glaring Difficulty, that ſtrikes at the very Foundation of their whole Syſtem, have, for a laſt Shift, invented what *Lucretius* calls *Clinamen*: By which is meant a Motion ſomewhat declining or bending from the ſtrait Line, and which gives Atoms the Occaſion to meet and encounter. Thus they turn and wind them, at Pleaſure, according as they fancy beſt for their Purpoſe. But upon what Authority do they ſuppoſe this Declination of Atoms, which comes ſo pat to bear up their Syſtem? If Motion in a ſtrait Line be eſſential to Bodies, nothing can bend, nor conſequently join them, in all Eternity; the *Clina-*

men

men deſtroys the very Eſſence of Matter, and thoſe Philoſophers contradict themſelves with out bluſhing. If, on the contrary, the Motion in a direct Line is not eſſential to all Bodies: why do they ſo confidently ſuppoſe eternal, neceſſary, and immutable Laws for the Motion of Atoms, without recurring to a Firſt Mover? And why do they build a whole Syſtem of Philoſophy, upon the precarious Foundation of a ridiculous Fiction? Without the *Clinamen* the ſtrait Line can never produce any Thing, and the *Epicurean* Syſtem falls to the Ground. With the *Clinamen*, a fabulous poetical Invention, the direct Line is violated, and the Syſtem falls into Deriſion and Ridicule.

Both the ſtrait Line, and the *Clinamen*, are airy Suppoſitions and mere Dreams: But theſe two Dreams deſtroy each other; and this is the Upſhot of the uncurb'd Licentiouſneſs ſome Men allow themſelves of ſuppoſing as eternal Truths, whatever their Imagination ſuggeſts them to ſupport a Fable; while they refuſe to acknowledge the Artful and Power-

ful Hand that form'd and placed all the Parts of the Univerſe.

SECT. LXXXVI.

Strange ABSURDITY *of the* EPICUREANS, *who endeavour to account for the Nature of the* SOUL, *by the* DECLINATION *of* ATOMS.

TO reach the higheſt Degree of amazing Extravagance, the *Epicureans* have had the Aſſurance to explain and account for what we call the Soul of Man, and his Free-Will, by the *Clinamen*, which is ſo unaccountable and unexplicable itſelf. Thus they are reduc'd to affirm, that 'tis in this Motion, wherein Atoms are in a Kind of *Æquilibrium* between a Strait Line, and a Line ſomewhat circular, that Humane Will conſiſts.

Strange Philoſophy! If Atoms move only in a Strait Line, they are inanimate, and uncapable of any Degree of Knowledge, Underſtanding, or Will: But if the very ſame Atoms ſomewhat deviate from the Strait Line, they become, on a ſudden, animate

nimate, thinking, and rational. They are themſelves Intelligent Souls, that know themſelves, reflect, deliberate, and are free in their Acts and Determinations. Was there ever a more Abſurd Metamorphoſis! What Opinion would Men have of Religion, if in order to aſſert it, one ſhould lay down Principles and Poſitions ſo trifling and ridiculous as theirs, who dare to attack it in earneſt?

SECT. LXXXVII.

The EPICUREANS *caſt a Miſt before their own Eyes, by endeavouring to explain the Liberty of Man by the* DECLINATION *of* ATOMS.

BUT let us conſider to what Degree thoſe Philoſophers impoſe upon their own Underſtandings. What can they find in the *Clinamen*, that, with any Colour, can account for the Liberty of Man? This Liberty is not imaginary: For 'tis not in our Power to doubt of our Free-Will, any more than it is to doubt of what we

are intimately conſcious and certain. I am conſcious I am free to continue ſitting, when I riſe in order to walk. I am ſenſible of it with ſo entire Certainty, that 'tis not in my Power ever to doubt of it in earneſt; and I ſhould be inconſiſtent with my ſelf, if I dar'd to ſay the contrary. Can the Proof of our Religion be more evident and convincing? We cannot doubt of the EXISTENCE of GOD, unleſs we doubt of our own Liberty: From whence I infer, that no Man can ſeriouſly doubt of the Being of the DEITY; ſince no Man can entertain a ſerious Doubt about his own Liberty. If, on the contrary, it be frankly acknowledg'd, that Men are really Free, nothing is more eaſy than to demonſtrate, that the Liberty of Man's Will cannot conſiſt of any Combination of Atoms, if one ſuppoſes, that there was no Firſt Mover, who gave Matter arbitrary Laws for its Motion. Motion muſt be eſſential to Bodies, and all the Laws of Motion muſt alſo be as neceſſary as the Eſſences of Natures are. Therefore, according to this Syſtem, all the Motions of Bodies muſt be perform'd by

by conſtant, neceſſary, and immutable Laws; the Motion in a Strait Line muſt be eſſential to all Atoms, that are not made to deviate from it by the Encounter of other Atoms; the Strait Line muſt likewiſe be eſſential either upwards, or downwards, either from Right to Left, or Left to Right, or ſome other Diagonal Way, fix'd, preciſe, and immutable. Beſides, 'tis evident that no Atom can make another Atom deviate: For that other Atom carries alſo in its Eſſence the ſame invincible and eternal Determination to follow the Strait Line the ſame Way. From hence it follows that all the Atoms placed at firſt on Different Lines, muſt purſue *ad infinitum*, thoſe parallel Lines, without ever coming nearer one another; and that thoſe who are in the ſame Line muſt follow one another *ad infinitum*, without ever coming up together, but keeping ſtill the ſame Diſtance from one another. The *Clinamen*, as we have already ſhewn, is manifeſtly impoſſible: But contrary to evident Truth, ſuppoſing it to be poſſible, in ſuch a Caſe it muſt be affirm'd that the *Cli-*

namen is no leſs neceſſary, immutable, and eſſential to Atoms, than the Strait Line. Now will any Body ſay, that an eſſential and immutable Law of the local Motion of Atoms, explains and accounts for the true Liberty of Man? Is it not manifeſt, that the *Clinamen* can no more account for it, than the Strait Line it ſelf? The *Clinamen*, ſuppoſing it to be true, would be as neceſſary as the Perpendicular Line, by which a Stone falls from the Top of a Tower into the Street. Is that Stone free in its Fall? *However*, the Will of Man according to the Principle of the *Clinamen*, has no more Freedom than that Stone. Is it poſſible for Man to be ſo extravagant as to dare to contradict his own Conſcience about his Free-Will, leſt he ſhould be forc'd to acknowledge his GOD and MAKER? To affirm, on the one Hand, that the Liberty of Man is imaginary, we muſt ſilence the Voice, and ſtifle the Senſe of all Nature; give our ſelves the Lye in the groſſeſt Manner; deny what we are moſt intimately conſcious and certain of; and in ſhort, be reduc'd to believe, that we have no

Eligibility,

Eligibility, or Choice of Two Courſes, or Things propoſed, about which we fairly deliberate upon any Occaſion. Nothing does Religion more Honour, than to ſee Men neceſſitated to fall into ſuch groſs and monſtrous Extravagance, as ſoon as they call in Queſtion the Truths ſhe teaches! On the other Hand, if we own that Man is truly free, we acknowledge in him a Principle, that never can be ſeriouſly accounted for, either by the Combinations of Atoms, or the Laws of local Motion, which muſt be ſuppoſed to be all equally neceſſary, and eſſential to Matter, if one denies a Firſt Mover. We muſt therefore go out of the whole Compaſs of Matter, and ſearch far from combined Atoms, ſome incorporeal Principle to account for free Will, if we admit it fairly. Whatever is Matter and an Atom, moves only by neceſſary, immutable, and invincible Laws: Wherefore Liberty cannot be found either in Bodies, or in any Local Motion; and ſo we muſt look for it in ſome Incorporeal Being. Now, Whoſe Hand tied and ſubjected to the Organs of this corporeal Machine, that incorporeal Being, which

which muſt neceſſarily be in me united to my Body? Where is the Artificer that ties and unites Natures ſo vaſtly different? Can any but a Power Superior both to Bodies and Spirits, keep them together in this Union, with ſo abſolute a Sway? *Two Crooked Atoms*, ſays an *Epicurean*, *hook one another*. Now, this is falſe, according to his very Syſtem: For I have demonſtrated, that thoſe Two crooked Atoms never hook one another, becauſe they never meet. But, however, after having ſuppos'd that Two crooked Atoms unite by hooking one another, the *Epicurean* muſt muſt be forc'd to own, That the Thinking Being, which is free in his Operations, and which conſequently is not a Collection of Atoms, ever moved by neceſſary Laws, is incorporeal, and could not by its Figure be hook'd with the Body it animates. Thus which Way ſoever the *Epicurean* turns, he overthrows his Syſtem with his own Hands. But * let us not, by any Means, endeavour to confound Men that err and miſtake, ſince we are Men as well as they, and no leſs ſubject to Error. Let us only

* *Here's a Sentence worthy of a Chriſtian Biſhop, and which ſavours of the primitive Apoſtolical Times!*

only pity them; ſtudy to light and inform them with Patience; edify them; pray for them; and conclude with aſſerting an evident Truth.

Sect. LXXXVIII.

We muſt neceſſarily acknowledge the Hand *of a* First Cause *in the* Universe, *without enquiring why that Firſt Cauſe has left* Defects *in it.*

THUS every Thing in the Univerſe, the Heavens, the Earth, Plants, Animals, and, above all, Men, bear the Stamp of a Deity. Every Thing ſhews and proclaims a ſet Deſign, and a Series and Concatenation of ſubordinate Cauſes, over-ruled and directed with Order by a ſuperior Cauſe.

'Tis prepoſterous and fooliſh to criticize upon this great Work: The Defects that happen to be in it, proceed either from the free and diſorderly Will of Man, which produces them by its Diſorder; or from the ever Holy and Juſt Will of God, who ſome Times has a Mind to puniſh impious Men, and, at other Times

Times, by the Wicked to exerciſe and improve the Good. Nay, it happens oftentimes that what appears a Defect to our narrow Judgment, in a Place ſeparate from the Work, is an Ornament with reſpect to the general Deſign; which we are not able to conſider, with Views ſufficiently extended and ſimple to know the Perfection of the Whole. Does not daily Experience ſhew, that we raſhly cenſure certain Parts of Men's Works, for want of being throughly acquainted with the whole Extent of their Deſigns and Schemes? This happens, in particular, every Day, with reſpect to the Works of Painters and Architects. If writing Characters were of an immenſe Bigneſs, each Character, at cloſe View, would take up a Man's whole Sight; ſo that it would be not poſſible for him to ſee above one at once; and therefore he would not be able to read, that is, put different Letters together, and diſcover the Senſe of all thoſe Characters put together. It is the ſame with the great Strokes of Providence in the Conduct of the whole World, during a long

long Succeſſion of Ages. There's nothing but the Whole that's intelligible; and the whole is too vaſt and immenſe to be ſeen at Cloſe View. Every Event is like a particular Character that is too large for our narrow Organs, and which ſignifies Nothing of it ſelf, and ſeparate from the reſt. When, at the Conſummation of Ages, we ſhall ſee in GOD, that is in the true Point, and Center of Perſpective, the Total of Humane Events, from the firſt to the laſt Day of the Univerſe, together with their Proportions, with regard to the Deſigns of GOD, we ſhall cry out: LORD, Thou alone are Juſt and Wiſe! We cannot rightly Judge of the Works of Men, but by examining the Whole. Every Part ought not to have every Perfection; but only ſuch as becomes it according to the Order and Proportion of the different Parts that compoſe the Whole. In a humane Body, for Inſtance, all the Members muſt not be Eyes, for there muſt be Hands, Feet, *&c.* So in the Univerſe, there muſt be a Sun for the Day; but there muſt be alſo a Moon for the Night.

Nec

Aug. L. de Lib. Arb. *Nec tibi occurrit perfecta Universitas, niſi ubi majora ſic præſto ſunt, ut minora non deſint.* This is the Judgment we ought to make of every Part, with reſpect to the Whole. Any other View is narrow and deceitful. But what are the weak and puny Deſigns of Men, if compar'd to that of the Creation and Government of the Univerſe? As much as the Heavens are above the Earth, as much, ſays GOD in the Holy Writ, are my Ways and my Thoughts above yours. Let therefore Man admire what he Underſtands, and be ſilent about what he does not comprehend. But after all, even the real Defects of this Work, are only Imperfections which GOD was pleaſed to leave in it, to put us in Mind that He drew and made it from NOTHING. There's not any Thing in the Univerſe but what does, and ought equally to bear theſe Two Oppoſite Characters; on the one ſide, the Seal or Stamp of the Artificer upon his Work; and on the other, the Mark of its Original Nothing, into which it may relapſe and dwindle every Moment. 'Tis an incomprehenſible

henſible Mixture of Low and Great; of Frailty in the Matter, and of Art in the Maker? The Hand of God is conſpicuous in every Thing, even in a Worm that crawls on Earth. Nothingneſs, on the other Hand appears every where, even in the moſt vaſt and moſt Sublime Genius. Whatever is not God, can have but a ſtinted Perfection, and what has but a ſtinted Perfection, always remains imperfect, on the ſide where the Boundary is ſenſible, and denotes that it might be improv'd. If the Creature wanted nothing, it would be the Creator Himſelf: For it would have the Fulneſs of Perfection, which is the Deity it ſelf. Since it cannot be Infinite, it muſt be limited in Perfection; that is, it muſt be imperfect on one ſide or other. It may have more or leſs imperfection; but ſtill it muſt be imperfect. We muſt ever be able to point out the very Place where it is Defective; and to ſay, upon a Critical Examination: This is what it might have had, what it has not.

Aug. de Ordine.

SECT.

SECT. LXXXIX.

The DEFECTS *of the* UNIVERSE, *compar'd with thoſe of a* PICTURE.

DO we conclude that a Piece of Painting is made by Chance, when we ſee in it either Shades, or even ſome careleſs Touches? The Painter, we ſay, might have better finiſh'd thoſe Carnations, thoſe Draperies, thoſe Proſpects. 'Tis true, this Picture is not perfect according to the niceſt Rules of Art. But how extravagant would it be to ſay: This Picture is not abſolutely perfect; therefore 'tis only a Collection of Colours form'd by Chance, nor did the Hand of any Painter meddle with it? Now, what a Man would bluſh to ſay of an indifferent, and almoſt artleſs Picture, he is not aſham'd to affirm of the Univerſe, in which a Crowd of incomprehenſible Wonders, with excellent Order and Proportion, are conſpicuous. Let a Man ſtudy the World as much as he pleaſes; let him deſcend into the minuteſt Details; diſſect the vileſt of Animals; narrowly conſider the leaſt

leaſt Grain of Corn, ſown in the Ground, and the manner in which it germinates and multiplies; attentively obſerve with what Precautions a Roſe-bud blows and opens in the Sun, and cloſes again at Night: And he will find in all theſe more Deſign, Conduct, and Induſtry, than in all the Works of Art. Nay, what is call'd the Art of Men, is but a faint Imitation of the great Art call'd the Laws of Nature, and which the Impious did not bluſh to call *Blind Chance*. Is it therefore a Wonder, that Poets animated the whole Univerſe; beſtow'd Wings upon the Winds, and Arrows on the Sun; and deſcribed great Rivers impetuouſly running to precipitate themſelves into the Sea, and Trees ſhooting up to Heaven, to repel the Rays of the Sun, by their thick Shades? Theſe Images and Figures have alſo been receiv'd in the Language of the Vulgar: So natural it is for Men to be ſenſible of the wonderful Art that fills all Nature. Poetry did only aſcribe to inanimate Creatures, the Art and Deſign of the Creator, who does every

Thing in them. From the figurative Language of the Poets, thoſe Notions paſs'd into the Theology of the Heathens, whoſe Divines were the Poets. They ſuppoſed an Art, a Power, or a Wiſdom, which they call'd *Numen*, in Creatures the moſt deſtitute of Underſtanding. With them great Rivers were Gods, and Springs, Naiads. Woods, and Mountains had their particular Deities; Flowers had their *Flora*; and Fruits *Pomona*. After all, the more a Man contemplates Nature, the more he diſcovers in it an inexhauſtible Stock of Wiſdom, which is, as it were the SOUL of the Univerſe.

SECT. XC.

We muſt neceſſarily conclude that there is a FIRST BEING *that created the* UNIVERSE.

WHAT muſt we inferr from thence? The Conſequence flows of it ſelf. If ſo much Wiſdom and Penetration, ſays *Minucius Fælix*, are required to obſerve the wonderful Order and Deſign of the Structure of the World: How much more were neceſſary to form it? If Men ſo much admire Philoſophers, becauſe

becauſe they diſcover a ſmall Part of the Wiſdom that made all Things: They muſt be ſtark blind, not to admire that Wisdom it ſelf.

Sect. XCI.

Reasons *why Men do not acknowledge* God *in the* Universe, *wherein he ſhews himſelf to them, as in a faithful Glaſs.*

THIS is the great Object of the Univerſe, wherein God, as it were in a Glaſs, ſhews himſelf to Mankind. But ſome, (I mean, the Philoſophers) were bewilder'd in their own Thoughts. Every Thing with them turn'd into Vanity. By their ſubtle Reaſonings ſome of them over-ſhot and loſt a Truth, which a Man finds naturally and ſimply in Himſelf, without the Help of Philoſophy.

Others, intoxicated by their Paſſions, live in a perpetual Avocation of Thought. To perceive God in his Works a Man muſt, at leaſt, conſider them with Attention: But Paſſions caſt ſuch a Miſt before the Eyes, not only of wild Savages, but even of Nations that ſeem to be moſt civiliz'd and polite, that they do not

ſo much as ſee the Light that lights them. In this Reſpect, the *Egyptians*, *Grecians*, and *Romans*, were no leſs blind, or leſs brutiſh, than the rudeſt and moſt ignorant *Americans*. Like theſe, they lay, as it were, buried within ſenſible Things, without going up higher; and they cultivated their Wit, only to tickle themſelves with ſofter Senſations, without obſerving from what Spring they proceeded. In this manner, the Generality of Men paſs away their Lives upon Earth. Say nothing to them: And they will think on nothing, except what flatters either their brutiſh Paſſions, or Vanity. Their Souls grow ſo heavy and unwieldy, that they cannot raiſe their Thoughts to any incorporeal Object. Whatever is not palpable, and cannot be ſeen, taſted, heard, felt, or told, appears chimerical to them. This Weakneſs of the Soul turning into Unbeliet appears Strength † of Mind to them; and their Vanity glories in oppoſing what naturally ſtrikes and affects the reſt of Mankind: Juſt as if a Monſter prided in not being form'd according to the common Rules of Nature;

† *Our Illuſtrious Author undoubtedly alludes to the Appellation of* Eſprits Forts *which in* French *ſignifies* Free Thinker.

ture ; or as if one born blind boaſted of his Unbelief with reſpect to Light and Colours, which other Men perceive and diſcern.

Sect. XCII.

A Prayer *to* God.

O MY God! If ſo many Men do not diſcover Thee in this great Spectacle, Thou giveſt them of all Nature : 'Tis not becauſe Thou art far from any of us. Every one of us feels Thee, as it were with his Hand: But the Senſes, and the Paſſions they raiſe, take up all the Attention of our Minds. Thus, O Lord, Thy Light ſhines in Darkneſs: But Darkneſs is ſo thick and gloomy, that it does not admit the Beams of Thy Light. Thou appear'ſt every where; and every where unattentive Mortals neglect to perceive Thee. All Nature ſpeaks of Thee, and reſounds with Thy Holy Name. But ſhe ſpeaks to Deaf Men, whoſe Deafneſs proceeds from the Noiſe and Clutter they make to ſtun themſelves. Thou art near, and within them: But they are fugitive, and wandering as it were, out of themſelves. They

would find Thee, O Sweet Light, O Eternal Beauty, ever Old, and ever Young, O Fountain of chaſte Delights, O Pure and Happy Life of all who live truly, ſhould they look for Thee within themſelves. But the Impious loſe Thee, only by loſing themſelves. Alas! Thy very Gifts, which ſhould ſhew them the Hand from whence they flow, amuſe them to ſuch a Degree, as to hinder them from perceiving it. They live by Thee, and yet they live without thinking on Thee; or rather, they dye by the Fountain of Life, for want of quenching their Drought in that Vivifying Stream: For what greater Death can there be, than not to know Thee, O Lord? They fall aſleep in Thy Soft and Paternal Boſom; and full of the deceitful Dreams by which they are toſs'd in their Sleep, they are inſenſible of the Powerful Hand that ſupports them. If Thou wert a Barren, Impotent, and Inanimate Body, like a Flower that fades away; a River that runs; a Houſe that decays and falls to Ruin; a Picture, that is but a Collection of Colours, to ſtrike the Imagination; or an uſeleſs Metal

Metal that glisters: They would perceive Thee, and fondly ascribe to Thee the Power of giving them some Pleasure, altho' in Reality, Pleasure cannot proceed from Inanimate Beings, which are themselves void and incapable of it, but only from Thee alone, the True Spring of all Joy. If therefore Thou wert but a Lumpish, Frail, and Inanimate Being; a Mass without any Virtue, or Power; a Shadow of a Being: Thy Vain, Fantastick Nature would busy their Vanity; and be a proper Object to entertain their mean and brutish Thoughts. But because Thou art too intimately within them, and they never at Home, Thou art to them an Unknown God: For while they rove and wander Abroad, the intimate Part of themselves is most remote from their Sight. The Order and Beauty Thou scatter'st over the Face of Thy Creatures, are like a glaring Light that hides Thee from, and dazzles their sore Eyes. Thus the very Light that should light them, strikes them blind; and the Rays of the Sun themselves hinder them to see it! In fine, because Thou

Aug. *Intimior Intimo nostro.*

art too Elevated, and too Pure a Truth, to affect groſs Senſes, Men who are become like Beaſts, cannot conceive Thee: Tho' Man has daily convincing Inſtances of Wiſdom and Virtue, without the Teſtimony of any of his Senſes; for thoſe Virtues have neither Sound, Colour, Odour, Taſte, Figure, nor any ſenſible Quality. Why then, O my GOD, do Men call Thy Exiſtence, Wiſdom, and Power, more in Queſtion, than they do thoſe other Things moſt real and manifeſt, the Truth of which they ſuppoſe as certain, in all the ſerious Affairs of Life, and which nevertheleſs, as well as Thou, eſcape our feeble Senſes? O Miſery! O diſmal Night, that ſurrounds the Children of *Adam!* O monſtrous Stupidity! O Confuſion of the whole Man! Man has Eyes only to ſee Shadows, and Truth appears a Phantom to him. What's nothing, is all; and what's all, is nothing, to Him. What do I behold in all Nature? GOD. GOD every where, and ſtill GOD alone. When I think, O LORD, that all Being is in Thee, Thou exhauſteſt and ſwallow'ſt up, O Abyſs of Truth. all my Thoughts.

I know not what becomes of me. Whatever is not Thou diſappears; and ſcarce ſo much of my ſelf remains, wherewithal to find my ſelf again. Who ſees Thee not, never ſaw any Thing; and who is not ſenſible of Thee, never was ſenſible of any Thing. He is as if he were not. His whole Life is but a Dream. Ariſe, O Lord, ariſe. Let Thy Enemies melt like Wax, and vaniſh like Smoke, before Thy Face. How unhappy is the impious Soul, who far from Thee is without GOD, without Hope, without eternal Comfort! How happy he who ſearches, ſighs, and thirſts after Thee. But fully happy he on whom are reflected the Beams of Thy Countenance; whoſe Tears Thy Hand has wiped off; and whoſe Deſires Thy Love has already compleated! When will that Time be, O LORD? O Fair Day, without either Cloud or End, of which Thy Self ſhalt be the Sun, and wherein Thou ſhalt run through my Soul, like a Torrent of Delight! Upon this pleaſing Hope, my Bones ſhiver, and cry out: *Who is like Thee, O LORD? My Heart melts, and my Fleſh faints, O GOD of my Soul, and my Eternal Wealth.*

A

A POEM ON THE Arch-Bp. of *Cambray*.

Writ by the late Duke of Devonſhire.

Cambray! whilſt of Seraphick Love you Write,
The nobleſt Image in the cleareſt Light!
A Love by no Self-intereſt debas'd,
But on th' Almighty's high Perfection plac'd.
A Love in which true Piety conſiſts,
That ſoars to Heaven without the help of Prieſts.
Let partial *Rome* the great attempt oppoſe,
Support the Cheat from which her Income flows:
Her Cenſures may condemn but not confute,
If beſt your elevated Notions ſuit
With what to Reaſon ſeems the Almighty's due,
They have, at leaſt, an Air of being true.
And what can animated Clay produce,
Beyond a Gueſs, in matters ſo abſtruſe?
But when, deſcending from the Imperial height,
You ſtoop of ſublunary things to treat,
Minerva ſeems the Moral to diſpenſe:
How great the Subject, how ſublime

the Senſe. No

Not the *Aonian Bard* with ſuch a flame
E'er ſung of ruling Arts; your lofty Theam
In your *Telemachus* his Hero's Son
We ſee the great Original outdone.
There is in Virtue ſure a hidden Charm,
To force eſteem, and Envy to diſarm;
Elſe in a flatt'ring Court you ne'er had been deſign'd
T' inſtruct the future Troublers of Mankind.
Happy your Native Soil, at leaſt by Nature ſo,
In none her Treaſures more profuſely flow:
The Hills adorn'd with Vines, with flow'rs the Plain
Without the Sun's too near approach ſerene:
But Heaven in vain does on the Vineyards ſmile,
The Monarch's Glory mocks the Labourer's Toile
What tho' elaborate Braſs with Nature ſtrive,
And proud *Equeſtriam* Figures ſeem alive,
With various Terrors on their Baſis wrought,
With yielding Citadels, ſurpriz'd or bought;
And here the ruins of a taken Town,
There a bombarded Steeple tumbling down:
Such Prodigies of Art, or coſtly Pains
Serve but to gild th' unthinking Rabbles Chains:
Oh! abject ſtate of ſuch as tamely groan
Under a blind dependency on One!
How far inferior to the Herds that range,
Wit native Freedom o'er the Woods and Plains?

With

With them no fallacy of Schools prevail,
Nor of a Right Divine the nauſeous Tale
Can give to one amongſt themſelves a Power,
Without controul, his fellows to devour.
To Reaſoning Human Kind alone belong
The Arts to hurt themſelves by reaſoning wrong.
Howe'er the fooliſh Nation firſt began,
Of truſting *abſolute* to lawleſs Man:
Howe'er a Tyrant may by Force ſubſiſt;
For who would be a Slave that can reſiſt?
Theſe ſet the Caſuiſt ſafeſt on the Throne,
Who make the People's Int'reſt their own;
And chuſing rather to be lov'd than fear'd,
Are Kings of Men, not of a ſervile Herd.
Oh Liberty! too late deſir'd, when loſt,
Like Health, when wanted, thou art valued moſt!
In Regions where no Property is known,
Thro' which the *Garone* runs and rapid *Rhone*,
Where Peaſants toil for Harveſt not their own!
How gladly would they quit their Native Soil,
And change for Liberty their Wine and Oil.
As Wretches chain'd and labouring at the Oar,
In ſight of *Italy*'s delightful Shoar,
Reflect on their unhappy Fate the more.
Thy Laws have ſtill their force above the reſt
Of *Gothick* Kingdoms, happy *Albion*! bleſt.

Long

Long ſince their ancient freedom they have loſt,
And ſervilely of their Subjection boaſt.
Thy better Fate the vain Attempts reſiſts
Of faithleſs Monarchs, and deſigning Prieſts,
Unſhaken yet the Government ſubſiſts.
While ſtreams of Blood the Continent o'erflow,
Red'ning the *Maeſe*, the *Danube*, and the *Po*,
Thy *Thames*, auſpicious Iſle, her Thunder ſends
To cruſh thy Foes, and to relieve her Friends.
Say Muſe, ſince no ſurprize, or foreign ſtroak,
Can hurt her, guarded by her Walls of Oak;
Since wholſome Laws her Liberty transfer
To future Ages, what can *Albion* fear?
Can ſhe the dear-bought Treaſures throw away?
Have Univerſities ſo great a ſway?
The Muſe is ſilent, cautious to reflect
On Manſions where the Muſes keep their Seat.
Barren of Thought, and niggardly of Rhime,
My creeping Numbers are forbid to climb;
Vent'ring too far, my weary Genius fails,
And o'er my drooping Senſes Sleep prevails.
An antick Pile near *Thameſes* ſilver Stream,
Was the firſt Object of my airy Dream;
In ancient times a conſecrated Fane,
But ſince apply'd to uſes more prophane;

Fill'd

Fill'd with a popular debating Throng,
Oft in the Right, and oftner in the Wrong:
Of good and Bad the variable Teſt,
Where the Religion that is voted beſt
Is ſtill inclin'd to perſecute the reſt.
On the high Fabrick ſtood a Monſter fell,
Of hideous form, Second to none in Hell:
The Fury, to be more abhorr'd and fear'd,
Her Teeth and Jaws with clods of Goar beſmear'd,
Her particolour'd Robe obſcenely ſtain'd
With pious Murthers, Freemen rack'd and chain'd,
With the implacable and brutiſh Rage
Of fierce Dragoons, ſparing no Sex nor Age.
With all the horrid Inſtruments of Death,
Of torturing Innocents to improve their Faith,
Clouding the Roof with their infectious Breath.
Thus ſhe began, Are then my Labours vain,
That to the Powers of *France* have added *Spain*?
Vain my attempts to make that Empire great;
And ſhall a Woman my Deſigns defeat,
Baffle th' Infernal Projects I've begun,
And break the Meaſures of my favourite Son?
Tho' far unlike the Heroes of her Race,
That made their Humours of their Laws take place,
And, ſlighting Coronation-Oath's, diſdain'd
Their high Prerogative ſhould be reſtrain'd,

Tho'

Tho' her own Iſle is bleſt with Liberty
Has ſhe a Right to ſet all *Europe* free?
Under this Roof, with management, I may
The Progreſs of her Arms at leaſt delay,
From a contagious Vapour I ſhall blow;
Within thoſe Walls Breaches may wider grow.
Here let imaginary Fears be ſhown
Of Danger to the Church, when there is none.
From trivial Bills let warm Debate ariſe,
Foment Sedition, and retard Supplies.
If once my treacherous Arts, and watchful Care,
Break the Confed'racy, and end the War,
Ador'd, in Hell I may in Triumph ſit,
And *Europe* to one Potentate ſubmit.
Waking at ſo deteſtable a Sound,
Which would all Order and all Peace confound,
I cry'd, Infernal Hag! be ever dumb;
Thee, with her Arms, let *Anna* overcome;
Who here reigns Queen, by Heav'ns on us beſtow'd,
To right the Injur'd, and ſubdue the Proud.
As *Rome* of old gave liberty to *Greece*,
Anna th' invaded ſinking Empire frees.
The Allies her Faith, her Power the *French* proclaim,
Her Piety th' Oppreſt, the World her Fame.
At *Anna*'s Name, dejected, pale, and ſcar'd,
The execrable Fantom diſappear'd.

FINIS.

THE CONTENTS.

SECT. I.

I. *Metaphyſical Proofs of the Exiſtence of* God, *are not within every Body's Reach.* Page 1.

II. *Moral Proofs of the Exiſtence of* God *are fitted to every Man's Capacity.* 2.

III. *Why ſo few Perſons are attentive to the Proofs Nature affords of the Exiſtence of* God. 4.

IV. *All Nature ſhews the Exiſtence of its Maker.* 6.

V. *Noble Compariſons proving that Nature ſhews the Exiſtence of its Maker.*

Firſt Compariſon, drawn from Homer's Iliad. 7.

VI. *Second Compariſon drawn from the* Sound *of* Inſtruments. 9.

VII. *Third Compariſon, drawn from a* Statue. 10.

VIII.

VIII. *Fourth Compariſon, drawn from a* Picture. 11.
IX. *A Particular Examination of* Nature. 14.
X. *Of the* General Structure *of the* Univerſe. 15.
XI. *Of the* Earth. 17.
XII. *Of* Plants. 21.
XIII. *Of* Water. 24.
XIV. *Of the* Air. 30.
XV. *Of* Fire. 32.
XVI. *Of* Heaven. 33.
XVII. *Of the* Sun. 35.
XVIII. *Of the* Stars. 39.
XIX. *Of* Animals, Beaſts; Fowl; Birds, Fiſhes; Reptiles, *and* Inſects. 43.
XX. *Admirable* Order *in which all the Bodies that make up the* Univerſe *are ranged.* 52.
XXI. *Wonders of the* Infinitely Little. 53.
XXII. *Of the* Structure *or* Frame *of the* Animal. 55.
XXIII. *Of the* Inſtinct *of the* Animal. *ibid.*
XXIV. *Of* Food. 60.
XXV. *Of* Sleep. 61.
XXVI. *Of* Generation. 63.
XXVII. *Tho'* Beaſts *commit* Miſtakes, *yet their Inſtinct is, in many Caſes,* Infallible. 72.

XXVIII. *'Tis impossible* Beasts *should have* Souls. 74.
XXIX. Sentiments *of some of the* Ancients, *concerning the* Soul *and* Knowledge *of Beasts.* 76.
XXX. *Of* Man. 80.
XXXI. *Of the* Structure *of* Man's Body. 81.
XXXII. *Of the* Skin. 83.
XXXIII. *Of* Veins *and* Arteries. 84.
XXXIV. *Of the* Bones, *and their* Jointing. 85.
XXXV. *Of the* Organs. 89.
XXXVI. *Of the* Inward Parts. 91.
XXXVII. *Of the* Arms, *and their* Use. 93.
XXXVIII. *Of the* Neck *and* Head. 94.
XXXIX. *Of the* Forehead, *and other* Parts *of the* Face. 98.
XL. *Of the* Tongue *and* Teeth. 100.
XLI. *Of the* Smell, Taste, *and* Hearing. 102.
XLII. *Of the* Proportion *of* Man's Body. 104.
XLIII. *Of the* Soul, *which alone, among all Creatures, thinks and knows.* 107.
XLIV. Matter *cannot Think.* 108
XLV. *Of the* Union *of the* Soul *and Body, of which* God *alone can be the Author.* 110.
XLVI. *The* Soul *has an* Absolute Command *over the* Body. 115.
XLVII. *The* Power *of the* Soul *over the* Body, *is not only* Supreme *or* Absolute, *but* Blind, *at the same Time.* 117.

XLVIII. *The* Sovereignty *of the* Soul *over the* Body *principally appears in the* Images *imprinted in the* Brain. 120.

XLIX. *Two* Wonders *of the* Memory *and* Brain. 125.

L. *The* Mind *of Man is mix'd with* Greatneſs *and* Weakneſs. *Its* Greatneſs *conſiſts in Two Things.*

Firſt, *The Mind has the* Idea *of the* Infinite. 127.

LI. *The* Mind *knows the* Finite *only by the* Idea *of the* Infinite. 129.

LII. Secondly, *The* Ideas *of the Mind are* Univerſal, Eternal, *and* Immutable. 130.

LIII. Weakneſs *of* Man's Mind. 133.

LIV. *The* Ideas *of Man are the immutable* Rules *of his* Judgment. 136.

LV. *What* Man's Reaſon *is.* 138.

LVI. Reaſon *is the* Same *in all* Men, *of all* Ages *and* Countries. 139.

LVII. Reaſon *in Man is* Independent *of and above him.* 144.

LVIII. *'Tis the* Primitive *Truth, that lights all Minds, by communicating it ſelf to them.* 146

LIX. *'Tis by the* Light *of the* Primitive Truth, *a Man judges whether what one ſays to him, be true or falſe.* 148.

LX. *The* Superior Reaſon *that reſides in Man is* God Himſelf; *and whatever has been above*

above discover'd to be in Man, are evident Footsteps of the Deity. 151.

LXI. *New sensible* Notices *of the* Deity *in* Man, *drawn from the Knowledge he has of* Unity. 152.

LXII. *The* Idea *of the* Unity *proves that there are* Immaterial Substances; *and that there is a* Being Perfectly One, *who is* God. 157.

LXIII. Dependence *and* Independence *of* Man. *His* Dependence *proves the* Existence *of his* Creator. 160.

LXIV. Good Will *cannot proceed but from a* Superior Being. 163.

LXV. *As a* Superior Being *is the Cause of all the* Modifications *of* Creatures, *so 'tis impossible for Man's Will, to will Good, by it self, or of its own accord.* 165.

LXVI. *of* Man's Liberty. 167.

LXVII. Man's Liberty *consists in that his* Will *by determining, modifies it self.* 168.

LXVIII. Will *may resist* Grace, *and its* Liberty *is the Foundation of* Merit *and* Demerit. 172.

LXIX. *A* Character *of the* Deity, *both in the* Dependence *and* Independence *of Man.* 175.

LXX. *The* Seal *and* Stamp *of the* Deity *in His Works.* 177.

LXXI. Objection *of the* Epicureans *who aſcribe every Thing to* Chance, *conſider'd.* 178.
LXXII. *Anſwer to the Objection of the* Epicureans, *who aſcribe all to* Chance. 180.
LXXIII. Compariſon *of the* World, *with a* Regular Houſe. *A Continuation of the Anſwer to the Objection of the* Epicureans. 185.
LXXIV. *Another* Objection *of the* Epicureans *drawn from the* Eternal Motion *of* Atoms. 188.
LXXV. Anſwers *to the* Objection *of the* Epicureans *drawn from the* Eternal Motion *of* Atoms. 191.
LXXVI. *The* Epicureans *confound the* Works *of* Art *with thoſe of* Nature. 195.
LXXVII. *The* Epicureans *take whatever they pleaſe for granted, without any Proof.* 196.
LXXVIII. *The* Suppoſitions *of the* Epicureans *are falſe and chimerical.* 198.
LXXIX. *'Tis falſly ſuppos'd that* Motion *is* Eſſential *to* Bodies. 199.
LXXX. *The* Rules *of* Motion *which the* Epicureans *ſuppoſe, do not render it eſſential to Bodies.* 202.
LXXXI. *To give a ſatisfactory Account of* Motion *we muſt recur to the* Firſt Mover. 204.
LXXXII. *No* Law *of* Motion *has it* Foundation *in the* Eſſence *of the* Body; *and moſt of thoſe* Laws *are* Arbitrary. 205.

LXXXIII. *The* Epicureans *can draw no* Conſequence *from all their* Suppoſitions, *altho' the ſame ſhould be granted them.* 207.

LXXXIV. Atoms *cannot make any* Compound *by the Motion the* Epicureans *aſſign them.* 209.

LXXXV. *The* Clinamen, *Declination or* Bending *of* Atoms, *is a Chimerical Notion, that throws the* Epicureans *into a groſs Contradiction.* 210.

LXXXVI. *Strange* Abſurdity *of the* Epicureans, *who endeavour to account for the Nature of the* Soul, *by the* Declination *of* Atoms. 212.

LXXXVII. *The* Epicureans *caſt a Miſt before their own Eyes, by endeavouring to explain the Liberty of Man by the* Declination *of* Atoms. 213.

LXXXVIII. *We muſt neceſſarily acknowledge the* Hand *of a* Firſt Cauſe *in the* Univerſe, *without enquiring why that Firſt Cauſe has left* Defects *in it.* 219.

LXXXIX. *The* Defects *of the* Univerſe, *compar'd with thoſe of a* Picture. 224.

XC. *We muſt neceſſarily conclude that there is a* FirſtBeing, *that created the* Univerſe. 226.

XCI. *Reaſons why Men do not acknowledge* God *in the* Univerſe, *wherein he ſhews himſelf to them, as in a faithful Glaſs.* 227.

XCII. *A* Prayer *to* God. 229.

FINIS.

BIBLIOTHECA BODLEIANA